

MANUFACTURERS' RECORD

A Weekly Southern Industrial and Hardware Newspaper.

Vol. XV. No. 24.
WEEKLY.

BALTIMORE, JULY 20, 1889.

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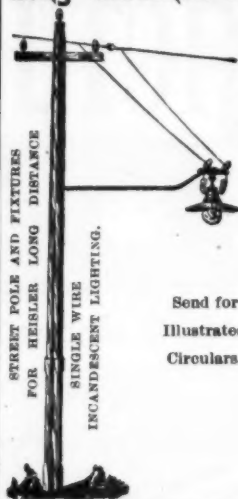
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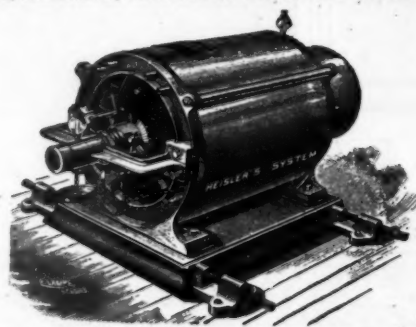
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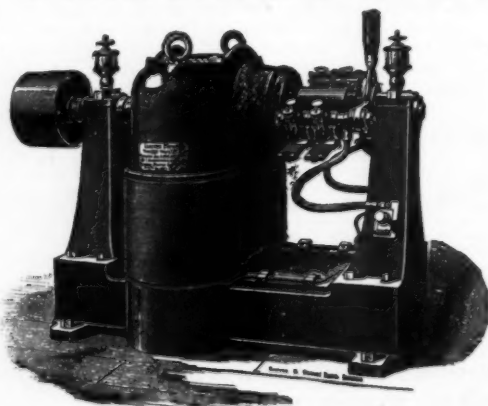
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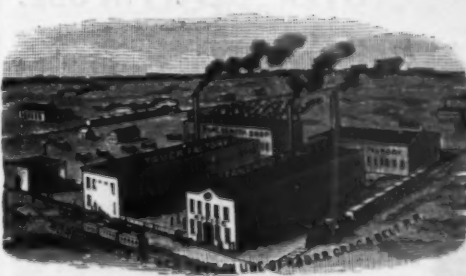
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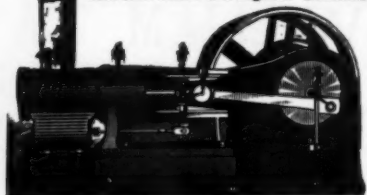
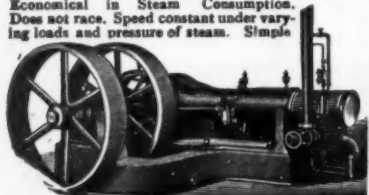
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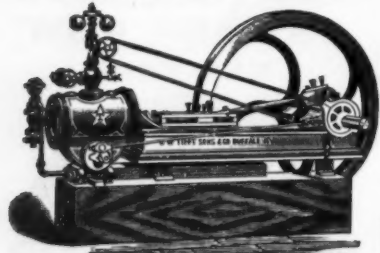
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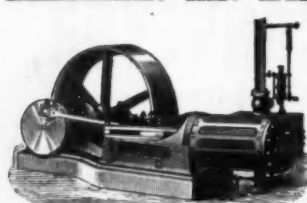


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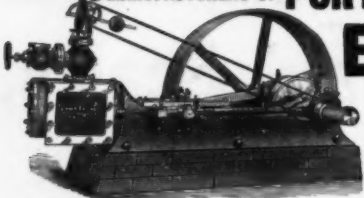
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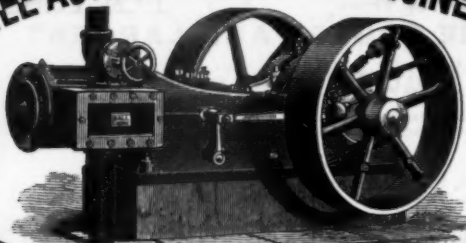
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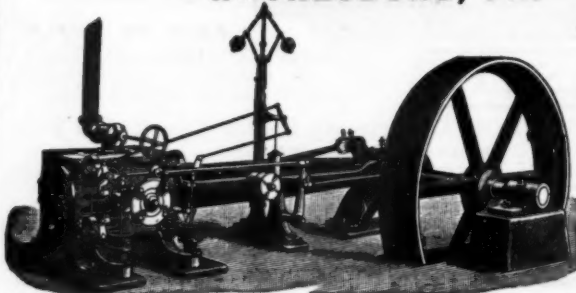
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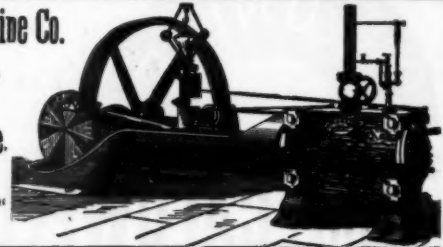
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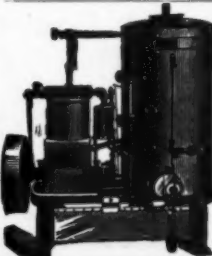
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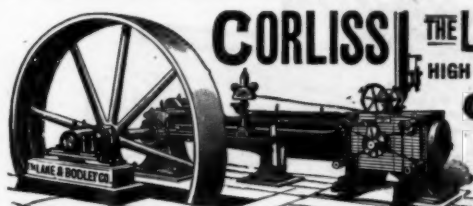
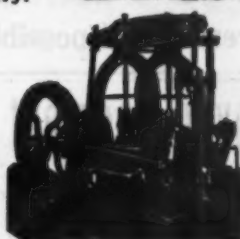
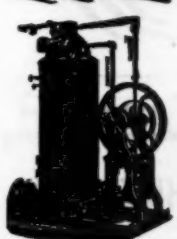
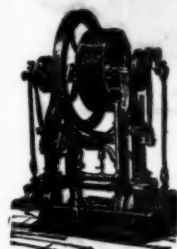
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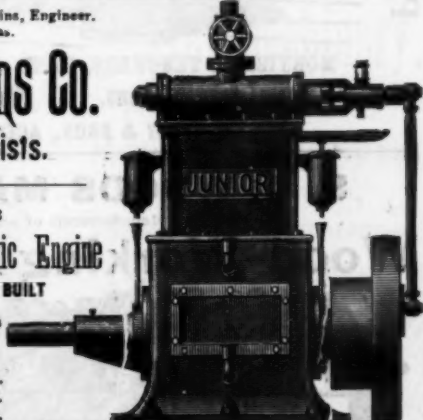
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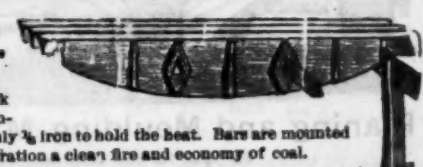
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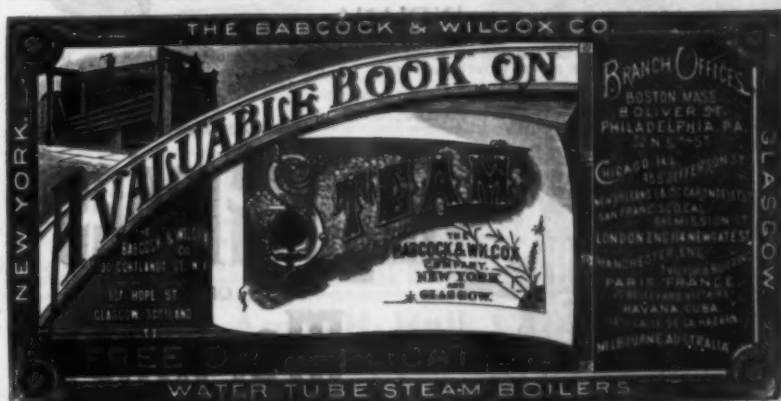
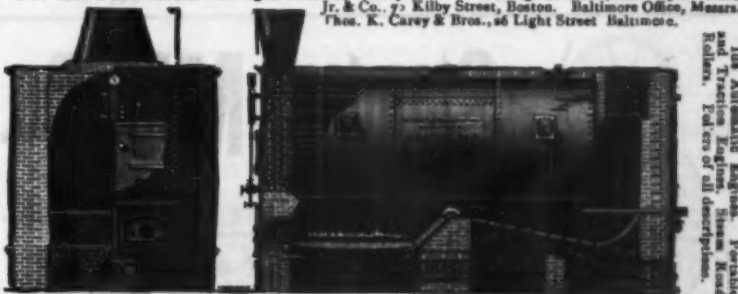
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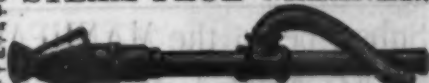
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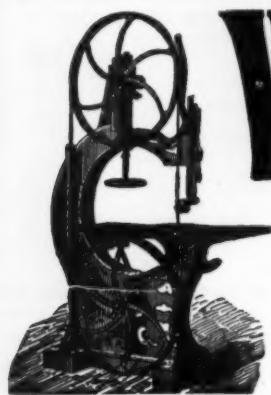
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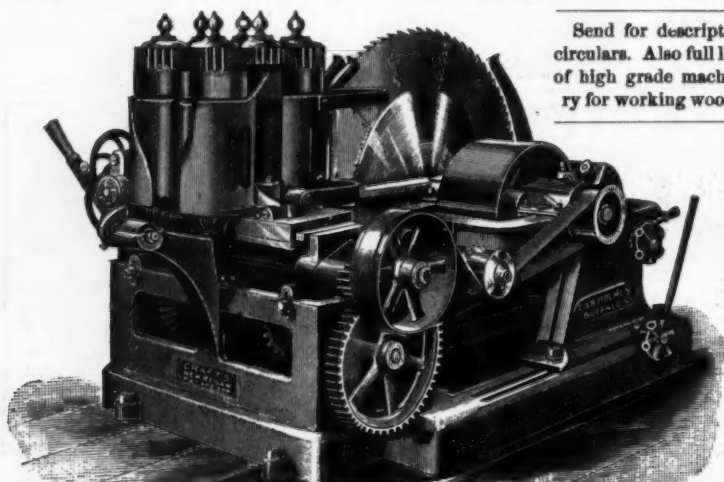


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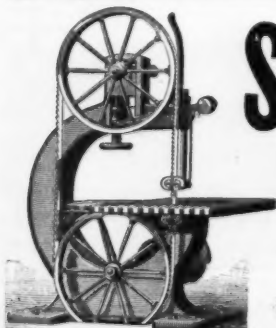
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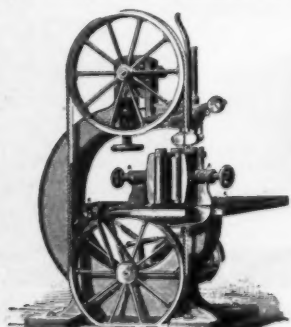


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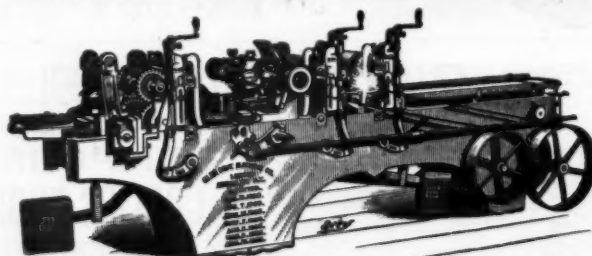
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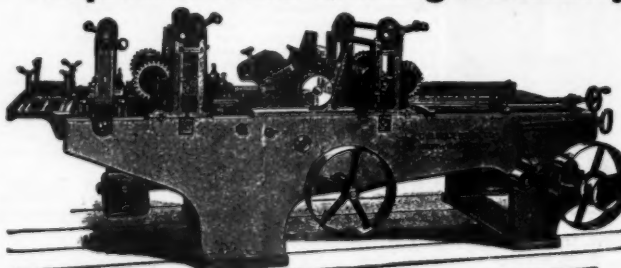
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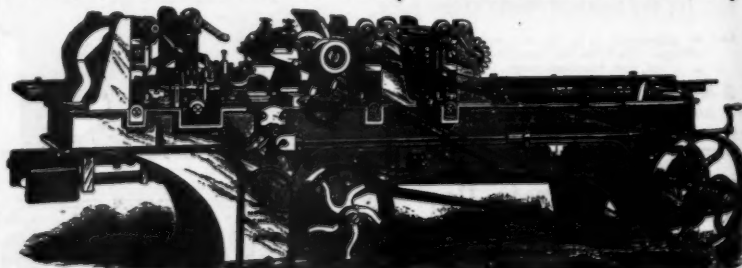


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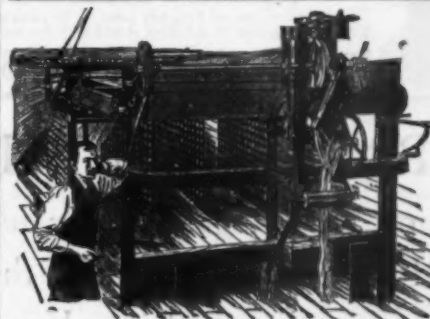
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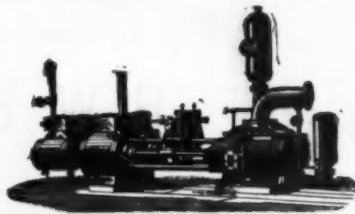
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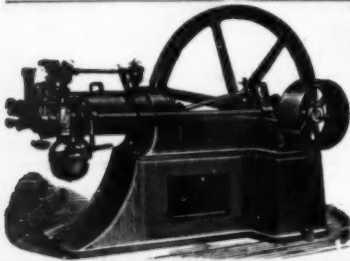
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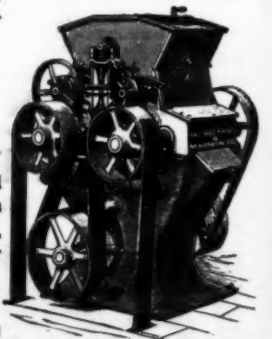


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THOMAS P. GRANTY, Southern Staff Correspondent.
Headquarters at FLORENCE, ALA.

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BALTIMORE, JULY 20, 1889

Six Months Railroad Building

The MANUFACTURERS' RECORD has often called attention to the rapid increase in railroad building in the South as compared with other sections, and this fact is emphasized by the report of the Railway Age, of Chicago, giving the amount of track laid in the whole country for the first six months of 1889. This was distributed as follows:

State.	Lines.	Miles.	State.	Lines.	Miles.
Maine.....	9	8	Michigan.....	2	14
New York.....	6	71	Indiana.....	3	16
New Jersey.....	4	41	Illinois.....	1	8
Pennsylvania.....	11	87	Minnesota.....	1	9
Maryland.....	2	6	Kansas.....	9	14
West Virginia.....	9	37	Missouri.....	5	35
Virginia.....	8	56	Indian Ter.....	2	35
N. Carolina.....	10	106	Texas.....	7	101
Georgia.....	7	142	Colorado.....	4	72
Florida.....	5	36	Montana.....	1	50
Alabama.....	4	31	California.....	5	50
Mississippi.....	3	171	Idaho.....	1	19
Louisiana.....	2	35	Oregon.....	2	19
Tennessee.....	6	105	Washington.....	6	62
Kentucky.....	5	61			
Ohio.....	4	52	Total 31 States.....	133	1,592

The 1,522 miles which have, says the Age, been added to our railway system in the past six months do not represent quite half the mileage reported for the same period in 1888, in which year the total of construction was about 7,100 miles. The number of lines, however, is not very much less, and on the other hand the number of roads on which track had been laid in the first half of 1888 was considerably larger than that in the same period of 1887, although the total mileage of 1887 was nearly twice that of the following year. These facts indicate what has been already referred to, that the tendency in the last two years has been to the construction of numerous short lines instead of a lesser number of long competitive lines; and in confirmation of this we find that the average length of all the track reported laid in the first half of 1887 was 27 miles to each road, while in the same period of 1888 it was only 20 miles, and in the first six months of the present year it has averaged only 12.3 miles. This indicates a very healthy condition of growth, the railway building now not being done in mad haste in order to occupy new territory before a rival has got there or because he has already got there, but the roads being built because they are believed to be needed. Very much of the work now going on is in the form of branches or extensions of old lines, but quite a number of roads are being built by independent companies.

It will be seen that the largest part of the tracklaying thus far this year has been done in the South, the ag-

gregate in this section being 847 miles, or considerably more than one-half of the total for the country. No better evidence could be asked of the increasing attention which the South is receiving from capitalists than these statistics of railroad construction.

THE MANUFACTURERS' RECORD is informed that a movement is on foot to develop a very valuable mineral property in Kentucky, located between the Cumberland and Tennessee rivers, which possesses the advantage of both these rivers for transportation purposes, and already has railroad facilities. New England capitalists are taking hold of the enterprise, and there is a prospect of some extensive developments.

FLORIDA is certainly enjoying a decided boom in sugar, says the St. Augustine News. Captain Rose, the originator and founder of the St. Cloud Sugar Mill near Kissimmee, is now receiving the machinery for a new mill about to be built, having capacity for manufacturing 6,000 pounds of dry sugar per day. The Lake Apopka Sugar Co. has just had a lot of machinery shipped to irrigate the immense tract of land in the neighborhood of the lake, which will be planted in sugar. Mills will be erected, and as a large sum of money is to be invested, the company will no doubt raise a large crop of cane.

THE Alabama papers are wisely urging the establishment of cotton mills. But it will be well if the projectors of new mills will prepare to make a different line of goods from what the majority of Southern mills are now producing. Diversity is a vital necessity in this industry. The MANUFACTURERS' RECORD has been preaching for years and has aroused the people to the importance of the subject, but the time has come for more practical vigorous work in that direction. Southern cotton mills are pressing to the danger limit of over production of coarse goods, and a change must be inaugurated. The South must diversify, and no time is to be lost in preparing for it.

"Journalistic Go-ahead-a-tive-ness."

One of the most remarkable enterprises of this progressive age has now been undertaken by the MANUFACTURERS' RECORD, of Baltimore—a journal which is devoted to the interests of the South and is constantly working for its advancement. With a view to making known to the world the vast wealth of the mineral and timber region of the South as yet untraversed by railroads, this wide-awake journal has organized an exploring party, under the direction and superintendence of Major Goldsmith Bernard West, a well-known expert in the exploration of mineral regions. The object of this expedition is thus set forth in the last issue of the MANUFACTURERS' RECORD: "By this practical and public-spirited enterprise, the expense of which will be borne solely by the MANUFACTURERS' RECORD, this energetic journal adds largely to its brilliant record of good work done for the South in time past, while as a specimen of journalistic go-ahead-a-tive-ness the undertaking is worthy of all praise, and ranks far in advance of anything ever before projected by any weekly journal in this country.—New York Daily Financial News.

Other Vegetable Fibres Than Cotton.

It would be of inestimable economic value to the South if the present agitation of the bagging question, which comes so close to the pocket of nearly every Southern planter, would result in the introduction of the raising of jute and other vegetable fibres in addition to cotton. We import into the United States something like 400,000,000 pounds of jute, hemp, sisal grass and other vegetable fibres each year. This fibre is manufactured elsewhere, then sold to the South. So we are paying East Indian or other planters to raise the fibre, English or other ship-owners to bring it to our shores, and Northern manufacturers to make it into bagging and cordage.

It would be very little trouble or expense for each cotton planter to agree to devote a certain proportion of his land to raising this fibre, and it would be a great benefit to him and his neighborhood if he would go to this little trouble, for it would be a step toward the diversification of crops, it would benefit his lands, it would leave money in his pocket which he is now sending out of the country, and it would open the way for a new industry in the South, and thus distribute among his neighbors the money he is now paying people in the North to weave his bagging for him. Jute raising would be no untried and uncertain experiment, as the following extract from The New South, published by the MANUFACTURERS' RECORD some two years ago, shows:

"I planted one-eighth of an acre with jute. The land was alluvial, such as is used for corn and cotton. To my surprise I saw the crop grow magnificently to perfection. I took some stalks to the Cotton Exchange in New Orleans which measured 15 feet high. I induced the Commissioner of Agriculture of Louisiana and other friends of mine to plant several acres, and I have been through their plantations, and it seems to grow admirably; so there is not the slightest doubt that jute will grow splendidly."

The writer was a gentleman who had lived in India ten years, and well understood jute culture.

The raising of sisal grass and other fibre has proved so profitable in Southern Mexico and Yucatan that the people have nearly abandoned food crops for them, according to our consular reports. This certainly would not happen were there not money in them. In the Philippine islands and elsewhere in the East Indies the same is true. The MANUFACTURERS' RECORD has hope that the planters of the South will not only make a systematic effort to raise these fibres, but go into the undertaking with the determination to manufacture the fibre also.

MR. D. A. TOMPKINS, of Charlotte, N. C., who has made such a remarkable record in building cotton-seed oil mills, now has contracts on hand for 16 mills ranging from 20 to 125 tons daily capacity each, and

three oil refineries of 400 barrels daily capacity each. This shows how actively the work of building new cotton-seed oil mills is progressing in the South.

Buy at Home.

To support home newspapers, home manufactures, home industries of all kinds, is a duty every man owes to his neighbors and to his fellow taxpayers. His income may be small or great and his expenditures in proportion, but whenever he buys elsewhere what he can get with equal advantage at home, he is injuring himself as well as his fellow-citizens. If our readers everywhere will look about them they will soon discover that they can find in their own town, county or State many things that they have been accustomed to obtain from distant places. This is particularly true of those manufactured goods of which the South is a heavy purchaser. Formerly nearly every tool, machine, household article and garment material used in the South was made at the North or in Europe. It was a necessity then, but it need not be in the future. Every day new industries are started and established ones are enlarged. The South has ceased to be absolutely dependent on other sections, and can make itself independent if its people will that it shall be. The first move in this direction must be the encouragement of home industries. Buy all you need of the quality you require at the nearest home point. Do not send North for anything you can get at the same price and of the same quality of some one near by. Enterprise in any community redounds to its advantage even when a single individual or firm is the immediate gainer.

One thing the South greatly lacks is ready money. There is great wealth of lands, buildings, merchandise and crops, but comparatively little of cash or its equivalent. Every dollar expended in it adds to the circulation and by so much reduces interest rates. Every dollar unnecessarily sent away has precisely the opposite effect. When a Southerner buys a hoe, a steam engine, a set of furniture, or any other thing that is made at the South from Northern manufacturers or their agents, he is by just so much helping to keep his section at the mercy of the "money lords" of the North, while every man who buys whatever the South produces that he needs is by little or by much assisting his section to attain financial independence.

Political economy, like charity, must begin at home if the South would attain the full measure of that wealth and that consequent financial independence for which God has given her the foundation in bounteous natural resources, but, in the practice of that economy, her people must learn to buy at home all her domestic products they need, and to purchase elsewhere nothing that she supplies.

Stopping the Leaks.

Now that the South is pushing so energetically for manufactures, and especially for cotton mills, we hope a lesson may be learned from the experiences of Northern manufacturers. A lesson should be learned from their successes, and causes should be looked after in cases of their failure.

We believe it is an undisputed truth that operatives in the cotton mills of New England receive more pay than operatives in the cotton mills of old England. Here is one advantage that the English manufacturer has over the American manufacturer. But in the American mill the operative will tend more machines than the operative in the English mill, so that the advantage is not as much in favor of the English manufacturer as it would seem to be at first. Yet the English manufacturer can undersell the American manufacturer in the world's market almost every time. Why is this?

A prominent manufacturer in Fall River, Mass., recently said that if the operatives in his mill would use the same care in doing work for him that they would probably use in doing work for themselves, he could afford to pay them \$50,000 a year more. In other words, the operatives in his mill, by their hasty and careless work, cause an annual waste of \$50,000. One apparent cause of this is giving the operative more machines to run than he can run economically. With the whole attention of the operative on his machines, it is impossible for him to guard against waste. An English operative will run four looms where an American operative will run seven, or possibly eight. This would look as though the American manufacturer had overreached in his attempts to reduce expenses; that he had stopped up a leak with a plug that had a big hole in it.

We of the South are apt to look upon the average New Englander as rather too close with his pennies. Yet it is this closeness that gives the New England manufacturer an advantage over the Southern manufacturer many times.

The time is not far off when the South must compete in the markets of the world with New England, and to do this we must practice economy, and we must learn the lesson so well that we can not only compete with the manufacturers of the North, but also with the manufacturers of England. When we can manufacture cotton goods as cheaply as England we shall control the market, for we shall save the cost of transporting the raw material. A long, hard lesson on economy is before us.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

Southern Industrial Progress.

In discussing the South's industrial progress as shown by our last quarterly list of new enterprises published June 29, the Railway Age, of Chicago, says: "The development of the varied advantages of mineral deposits, forests, water-power, soil and climate with which a large area in the Southern States is favored has been going on for a few years with surprising vigor. While the South always had natural resources sufficient to give it a leading position in respect to manufacturing industries, it lacked the capital, and, it must be confessed, its people generally lacked the energy to take advantage of what nature has done for them. But capital from the Northern States and from foreign countries has at last been induced to investigate the opportunities for profit which exist in the iron, coal and timber regions of Alabama, Georgia, Kentucky, Tennessee, Virginia and the Carolinas, and already within a few years many millions of dollars have been expended in the building of railways, the development of mines and the construction of mills and factories. The railway has really been the pioneer in all this great work of development. Locked up in the mountains, without means of transportation at hand, all the vast wealth of nature is practically valueless, and had it not been for the courage of the railway builders who dared to push their lines into the wilderness far in advance of population and traffic of any kind the great growth of which the South now so justly boasts would not have been possible. The railways first made the rich mining, timber and agricultural regions of the South accessible, and then, with great energy and persistence, made their attractions known, and brought in not only immigrants who simply wanted homes, but also capitalists living far distant, who were induced to invest some of their wealth on the representations of the possibilities which had been made known.

The record of the number of industrial establishments which have recently been established and projected in the fourteen States which may be called Southern, extending from West Virginia to and including Texas, is a remarkable one. From the MANUFACTURERS' RECORD, of Baltimore, a journal which is entitled to the highest credit for the great work which it has done in calling attention to the industrial possibilities of the South, we take the following comparison of the new enterprises organized or proposed in the fourteen States referred to during the first six months of 1889 and in the corresponding period of the three previous years. * * *

The manufacturers and railways of the entire country are directly interested in the development of these new industrial regions. It is now claimed by Southern mine and mill

owners that they can produce iron and steel at very much less than the present cost in other parts of the country, and if this proves true and the vast deposits of ore and coal in the Southern States are worked on a large scale, great changes will necessarily result both to the manufacturing interests and in the carrying trade. The Southern railways are necessarily the beneficiaries to a great degree of this new industrial development, and they will receive liberal returns for the enterprise of their builders in opening up these promising regions, while also the building of many other roads throughout the South is made a certainty."

The Usual Result.

In the MANUFACTURERS' RECORD, of Baltimore, a week or two since, appeared a letter from the pen of Mr. John P. Coffin in regard to Florence. Among other things he mentioned that an ice factory was about to be started here. Several days ago a letter was received by one of the most active citizens of Florence from a Northern party, who is a manufacturer of ice machines, in which it was stated that he would place an ice machine in Florence, and take as much of the capital stock as the citizens interested would allow him. This offer, it is said, has been accepted, and Florence will have an ice factory by next summer which will supply the surrounding country and neighboring towns and cities with the article.—Florence (S. C.) Times.

That is the usual result. The MANUFACTURERS' RECORD is read all over the country by people contemplating investments South, and many millions of dollars have gone there through its work. If the people in the South wish to draw attention to their locality and the opportunities for investment the MANUFACTURERS' RECORD is the medium for them to use.

ONE thing that is a menace to the stability of the progress of the South is the gambling and speculating spirit, especially in lands. Florida is now paying the penalty of land speculation to a greater extent, perhaps, than any other Southern State, but others have been working dangerously near the outside limit. The MANUFACTURERS' RECORD does not deny that these lands, as a whole, are very valuable, but when an attempt is made to force progress, a false step has been taken. We are building for the future, and the fact must not be overlooked that in the nature of things land must appreciate in value during the next quarter or half century. But the attempts to force prices up to the point near where they are expected to be in this future, is to put a more slimy foundation under this progress than can support it. Instead of being a benefit this forcing operation is a great detriment and retards growth. No good cause receives aid from speculation. A boom may be a great benefit, provided it can be checked before the speculative mania takes possession of it.

At the regular monthly meeting of the directors of the Anniston City Land Co., held on Tuesday afternoon, the sum of \$5,000 was subscribed to the Alabama Car Works enterprise, and a like amount to the stove foundry which is now in contemplation. This is the practical way of manifesting interest in manufacturing enterprises.—Anniston Hot Blast.

Anniston will be fortunate if she secures the establishment of these industries. That thriving place has built a solid foundation of big industries—big furnaces, big pipe works, big car works—all in successful operation, and now it needs diversified factories. The land company of which Col. John M. McKleroy is the able president appreciates this, and it is doing good work in contributing to their establishment.

HON. HENRY EXALL possesses rare qualifications for the office of Governor of Texas. Besides being one of the politest gentlemen in the State, he has talent and business tact of the highest order. He would appear well as His Excellency.—Jefferson (Texas) Iron News.

Better keep Mr. Exall where he is, as one of the foremost leaders of the industrial development in Texas. He can't be spared from that work to be Governor. There is plenty of good material in Texas to make governors out of it, but the supply of such business men of broad and progressive views as Mr. Exall is not sufficient to spare him from industrial interests at this important period in the State's history. He is doing a greater work for the State than he could do as Governor. That he would make one of the best governors Texas ever had admits of no questioning, but the South to-day needs active, progressive business men more than it needs politicians.

NORTH CAROLINA will soon have a State Agricultural and Mechanical College at Raleigh. The trustees of this new institution met last week and decided upon rules for the admission of students. They also, by unanimous vote, offered the presidency to Hon. Thos. J. Jarvis. This was an eminently wise choice, and, should Governor Jarvis accept, the college will at once enter upon a career of usefulness and prosperity. Under the regulations every county in the State is entitled to as many scholarships as it has representatives in the legislature. To such, lodging and tuition will be free, and board will be but \$8 a month. The State owes this new institution to the energetic, enthusiastic and intelligent work of Mr. W. S. Primrose, of Raleigh, who created a public sentiment in its favor that took the form of donations of land and money from private citizens, and of provisions by the legislature for its establishment and continued support.

THE MANUFACTURERS' RECORD declares that the South is destined to become the steel and iron center of the world. The MANUFACTURERS' RECORD utters a prophecy that is already being rapidly fulfilled.—Americus (Ga.) Recorder.

GETTING TO WORK.

Major West About to Set Out on His Important Mission.

Some Preliminary Remarks Concerning the State of Kentucky.

HEADQUARTERS
MANUFACTURERS' RECORD EXPEDITION,
ASHLAND, KY., June 10, 1889.

Before going into the details of localities it may be desirable to make a few preliminary remarks at large in regard to the State of Kentucky, with which it is intended to commence the work of the MANUFACTURERS' RECORD RECONNOISSANCE.

It has often struck me as an amusing fact that when Kentuckians think well of a man of other nativity they seem to sympathize with him because of his unhappy accident of birth. After a considerable and growing experience of the State and its people, it is only fair to state that were I a Kentuckian, I think I should feel pretty much the same way. Nature appears to have lavished gifts of soil, climate, water, timber and great mineral wealth upon this Commonwealth in a way that has no limit—and the people appreciate it. To the student of sociology, and especially of American social evolution, the population of Kentucky constitutes a mine of interest and information. It goes without saying that in the early days of the settlement, when the country was an unbroken wilderness, and the pioneer was forced to contend with wild Indians, wild animals, wild mountains, and the other accessories and accidents of the wildest life of which there is record—that the pioneer had to be a man of more than average courage, self-reliance and energy to survive the perils and hardships of his environment, and, in addition, to plant a hardy, vigorous family stock permanently in the new regions. That the early settlers did so, and successfully, after innumerable bloody battles with the red men whom they finally eliminated from the situation, shows clearly enough the sort of stuff they had in them, and it is worth remembering that the people of Kentucky to-day are of the unmixed stock of their heroic pioneer progenitors.

It is claimed in the State that Kentucky presents to the world the purest population of unadulterated Anglo-Saxon lineage to be found anywhere; that in this respect it quite ranks England, in which country the admixture of Celtic and other foreign blood for generations has left hardly anybody free from a trace or more of outland fluid in his veins. Peculiar conditions of topography have, until very lately, shut Kentucky out from all easy communication Eastward, and about every other way, for that matter. Ridges upon ridges of parallel mountain cut the State off from the coast districts, while other ridges so cover Eastern Kentucky that until now, and only since important mineral and timber developments have modified opinion, it has been a sort of axiom with engineers that it was cheaper to go around Kentucky than through it. Thus the earlier railway developments came not to Kentucky. The Louisville & Nashville system, already on the ground before the war, finally pushed into the mountains, but not to any great extent until the successful completion of the Cincinnati Southern and the Chesapeake & Ohio, coupled with the certainty of paying business from mines and mills, rendered that course at once necessary and safe. Even then the construction account, as illustrated in the cost of the Cincinnati Southern, for example, caused the hearts of

railway magnates to bleed, while holders of any junior form of railway security tore their hair in desperation.

But, in one way or another, American enterprise is "getting there," despite all obstacles, just as usual; and not only are the great trunk lines pushing into the rich heart of the mountains in every direction, but half a dozen tentative railway schemes, some of them struggling toward success for the past two decades, are now in the active, constructive phase of existence, or have secured the financial aid necessary to go to work. But for the delay caused by a long tunnel, the Kentucky Union Railway would be now in operation as far as Jackson in Breathitt county—right in the thick of the splendid canal coal beds of that locality. The Kentucky Midland is pushing on, and the road from Bristol, Tenn., to connect with and form a continuous line with the Chatteroi Road along the Big Sandy through the Cumberland mountains, is getting along as fast as possible. More of these things as we come to them in their order! Well, to revert to the old conditions for a moment, it is reasonably plain that a good deal of the conservatism, which still lurks here and there in the agricultural and pastoral parts of the Commonwealth, is accounted for in the isolation from general communication with the country at large that so long obtained. This isolation, with its attendant provincialism, antagonism toward immigration, objection to anything like progress which might involve change in the comfortable order of things, was, after all, probably a not unmixed evil. It saved Kentucky from a general infusion of all sorts of foreign blood; and now that the time, opportunity and facilities come along in combination with a vigorous desire to promote material progress—very generally entertained I think—the situation occurs in the presence of an intelligent, energetic, virile, self-respecting and truly patriotic American population well equipped, able and determined to make the most out of it. It seems to me that the world of capital will find it an advantageous thing to give careful study to the resources and opportunities of Kentucky, and, if the same be found sufficiently attractive in themselves, to make stray ventures here. The Simon pure Kentucky American stock is going to make a record in the race of our progress during the coming twenty-five years that will parallel the achievements of its ancestors who won a high and noble civilization from the savage wilderness a century ago.

It has been often remarked in the columns of the MANUFACTURERS' RECORD and other representative journals, that while Kentucky has been much regarded as a Southern State on account of the Virginia and other Southern origin of its settlers, and the sentiments, traditions and affiliations that have followed naturally upon such a genesis, it is plain that it is not a Southern State in much else. True, it produces cotton to a limited and tobacco to a great extent; but, outside of cotton, its crops are not especially Southern in character. Connecticut raises tobacco too. Kentucky, only separated from Ohio on the north by the Ohio river, has a climate in common with that State in its uppermost count es, and, thence to its Southern limit, is a country where overcoats and good hot fires are not only welcome but necessary in winter. I have known the temperature to drop to 30 degrees below zero (Fahrenheit) in Lexington. Neither the summer nor the winter climate differs enough from the same in Ohio or Pennsylvania to make necessary any change of life, habits or raiment between them.

Perhaps this may seem an unimportant observation, but the characteristic resources of Kentucky, particularly its mineral and timber resources, are of a kind, naturally, to attract Eastern and Northern enterprise,

and it is just as well to keep the people of those sections in mind that, beyond somewhat shorter winters, they will hardly realize that they have made any change in moving to Kentucky, while in everything that goes to make life comfortable the change will be undoubtedly to their satisfaction and advantage.

II.

Here in the neighborhood of Ashland, where I write, and am waiting to start in the morning along the pleasant though precipitous "banks and braces" of the Big Sandy, with a party armed for business—it is an excellent locality in which to realize the start of industry in the State. Within four miles or so you can stand where one may throw his hat, or a stone any way, into your choice of three sovereign and mighty States. Then here is the Ohio river, which, I may be pardoned for saying, was Kentucky's only railway for generations. Adown its virgin solitudes were wafted perhaps the larger portion of the first inhabitants. Men like Daniel Boone, already a chronic mountaineer, and his friends, the tough and hardy backwoodsmen of Virginia and North Carolina ranges, came in over a never ending series of trackless, densely wooded ridges. Their tollsome march was not an attractive excursion to the lowland gentry who, or whose younger sons, wanted to seize the rich trans-Alleghany territory in short order. Very likely it looked to them too much like another interesting excursion of Southern enterprise, for the particulars of which we are indebted to that eminent poet and traveler, the late Mr. Thomas Moore, whose hero in the case appears to have shown signs of 'having 'em' for

Away to the Dismal Swamp he speeds,
His path is rugged and sore;
Through tangled beds of juniper weeds,
And many a fen where the serpent sleeps,
And man never trod before.

Well the lowland people did not affiliate with the mountain idea, and so many of them took a circuitous route up the valleys to the Ohio river, and floated down stream to the blue-grass region, which they saw, liked and took possession of with the best and most pious intentions; also with that complete indifference to the rights, prejudices or wishes of the aboriginal inhabitants which has ever been a characteristic mark of Anglo-Saxon policy toward every sort of "natives" anywhere on the green earth. Without concerning ourselves with the ethics of century old discussions between the first Kentuckians and Mr. Lo, who very speedily became the "poor Indian" of history, it is sufficient to observe that our Kentucky friend is still here and in undisputed and contented possession; surrounded by flocks and herds; enjoying the wealth that successful planting and pastoral life affords, and now beginning to roll up other riches, drawn from the vast mineral and forest resources of his habitat. When the gallant "colonel" is away on his travels and exclaims, "eivis Kentuckianus sum," with a look which seems to imply that he can Sullivanate any son of Eve who is not, who, forsooth, shall cast the first stone at him? Not the humble writer here, who knows better than to heave rocks at that sort.

So to-morrow, if nothing untoward happen, we shall get into the Big Sandy country, where there is promise of things interesting to capital and enterprise generally. Not the least part of the promise is in connection with the canal coal and iron ore developments. It is well known, of course, that Kentucky possesses the most wonderful of American coal fields in point of extent, variety, quality and exploitability. There has been a lack of iron developments in close proximity to the cooking coals. Nor have experts been very sanguine as to the probabilities of discovering great bodies of the ores associated with the

sub-carboniferous upon which to justify base extensive iron plants. Of late, however, it is claimed that a huge limonite deposit has been found in the Big Sandy district. At the same time there is a growing probability that the Clinton formation which comes up with the Cumberland uplift, both on the Virginia and Kentucky sides, forming a synclinal basin, carries the red fossiliferous ores for the entire length of that uplift. On the Kentucky side the escarpment of Pine mountain is covered with debris. Wherever local conditions have favoured the washing away of this debris the Clinton ore is said to crop out, and the same is reported as true of several points at which experimental cuts have been recently made. Things like these are of almost national importance. If the expectations of the best informed people here are half realized, there will come another development like that of Alabama. But the facts will have to be examined closely before much is said on the matter beyond mere reference to the possibilities.

Not far from where we are the first furnace west of the Alleghanys was started by John Cockey Owings and Col. Greenup. The date is uncertain, but it must have been somewhere in the last decade of the 18th or early in the first of the 19th century. It is sure to have been built by 1800. Thos. Jefferson, in a letter written, I think, in 1789, referred to an iron work already in existence in Kentucky, and it is possible that he meant that built by Owings and others. It was partly on account of the association with this district of the first of Kentucky industrial enterprises that it is selected as the point from which to begin the description of the State's resources and present industrial development.

GOLDSMITH BERNARD WEST.

THE News and Courier, of Charleston, recently expressed a desire for the establishment of cotton-oil refineries independent of the Trust, that the many new mills now going up might be able to have their oil refined. The MANUFACTURERS' RECORD is glad to say that this is already being done. The Charlotte Oil & Fertilizer Co., of Charlotte, N. C., the Gate City Oil Co., of Atlanta, and the Planters & Merchants' Oil Co., of Houston, Texas, all new independent companies of large capital, are now building refineries of 400 barrels daily capacity each. These refineries will be ready early in the fall to buy oil or to refine it for a fixed charge, thus opening to the new mills a market for all their product entirely independent of Trust influences.

AN effort is being made to introduce among the iron manufacturing establishments of the city, says the Louisville (Ky.) Post, a new feature in the process of producing manufactured iron and steel. The process consists of a new way of using silica in the iron manufacture. It makes the cost of manufacture about one-third cheaper than by the old process. It is a comparatively new discovery, but is now successfully in use by nearly all of the leading iron and steel manufacturers throughout the country.

THE lumber manufacturers, wood-workers and dealers in Nashville, Tenn., are: Seventeen band saw mills, aggregate daily capacity 482,000 feet; seven circular saw mills, aggregate daily capacity 107,000 feet; twenty-one planing mills, aggregate daily capacity 555,000 feet; twenty lumber yards, aggregate daily capacity 537,000 feet. The lumber handled in the Nashville market is 300,000,000 feet annually, and the capital invested is \$4,327,000. The manufacture of farm wagons, carts, etc., consumes annually more than 3,130,000 feet of lumber, one firm alone having an annual output of 18,780 wagons and carts.

NATURAL GAS.

Development in Gas Matters in Kentucky.

BRANCH OFFICE MANUFACTURERS' RECORD,
LOUISVILLE, KY., June 17, 1889.

The search for natural gas in Kentucky is being actively prosecuted, and gas has now been found in every section of the State except the extreme west. The great field in Meade county, from which the city of Louisville is drawing its supply, was at first thought to contain all the gas that would be found outside of the mountain districts. The indications were so strong and the field was so well defined to geological eyes that there was never any experiment connected with the boring in Meade county. Now, however, only forty miles west of Meade county, entirely outside of the Meade county field, and in a locality where the geologists predicted with the utmost confidence that no gas would be found, the finest well in Kentucky has just been struck. This is at Cloverport, a very solid and substantial town of 2,000 inhabitants on the Ohio river, in Breckinridge county. The well, which is variously estimated to be producing from 500,000 to 1,000,000 feet per day, is entirely unlike the wells in the Meade county field. In the latter the gas is reached in a common black shale at a depth of about 430 feet, and is the common odorless gas now so familiar in the developed gas territory. The well at Cloverport is over 900 feet deep, and the gas has been discovered there in a stratum which thus far has not been recognized by the geologists. Certainly, however, it is not in the black shale, which has not even been encountered. There is an idea that the gas-bearing rock at Cloverport is what is known as the "Keokuk." The gas has a very strong odor, like that of the ordinary artificial coal gas for lighting purposes, being strongly impregnated with petroleum. This makes it a very safe gas to use, since any leakage will make itself known instantly. The quality is also unusually pure, and but for the presence of oil, it could be easily used for every lighting purpose. As it is the pressure is very strong, and one well already furnishes a sufficient flow to furnish the whole town of Cloverport with all of its heat and light, and could supplant all the coal now used there. There are several other wells that are in process of boring at Cloverport, and there is no doubt that a splendid field is about to be opened.

The pioneers in the gas wells are persuaded that they can also obtain petroleum in paying quantities, and one of the wells will undoubtedly be pushed through the stratum of rock from which the gas is obtained in the hopes of finding petroleum below. The country round about is full of indications of the existence of petroleum upon a large scale. Immense deposits of cannel coal are to be found in the hills some distance from the river, and what is known as asphaltum rock, which is simply a sandstone or limestone strongly impregnated with petroleum, abounds over the whole country. For more than fifty years the springs in the neighborhood, known as the Tar Springs, have been famous for their medicinal virtues, the water being impregnated with petroleum, which forms on top into a substance closely resembling common tar. It is, of course, beyond question that the cannel coal and the asphaltum rock indicate the presence of oil and in very large quantities. The proximity of the territory to river and railroad shipping lines would make the discovery of oil very valuable and important.

The discovery of the gas is in itself enough to make the fortune of Cloverport, and assure its future. In the vicinity of Cloverport is to be found abundance of sandstone, which has been tested in Pennsylvania, and proves to be very useful in

the manufacture of plate glass. In the adjoining county of Hardin are vast beds of glass sand the product of which is already being shipped to glass manufacturers in several States. These are all so convenient to Cloverport that they may practically be said to be in the town, and the purity and the quality of the gas supply (if it is supplemented by abundance in quantity) will mark it as a point where glass works are sure to be established. It is understood that the De Pauws, of New Albany, have already had their experts on the ground looking into the gas supply and the sandstone. The De Pauws have spent a great many thousand dollars in boring for natural gas and making experiments with artificial fuel to take the place of coal and which would enable them to compete with the glass factories established in the natural gas field of Pennsylvania, Ohio and Indiana. It is not improbable, therefore, that before long this great industry will be bodily removed to Kentucky, and Cloverport is an excellent point in every respect for its permanent location.

The town of Cloverport already has a great many advantages to attract manufacturers and population. The county of Breckinridge is a very large one, and a very law-abiding and thrifty population inhabits it. Cloverport, with about 2,000 population, is beautifully situated on the river, and is a very picturesque, healthful and substantial place. The town is filled with comfortable and beautiful homes, and the people are very well-to-do and thrifty. There are no very rich people, and the number of people who are very poor is extremely small. It has always been a very quiet and orderly place, and is, therefore, in every respect a desirable point for settlement. Many years ago before petroleum had been discovered oil was manufactured there upon a very large scale out of the cannel coal in the vicinity, and the ruins of the great works, which had employed several hundred men and paid out hundreds of thousands of dollars yearly in wages, are still to be seen. The discovery of petroleum destroyed these works as if by a breath, but the company owning the cannel coal field continued to mine the coal with varying fortune, and to-day the cannel coal industry has succeeded the oil industry. Cannel coal is shipped from Cloverport to New York and Europe and points all over the United States at a very profitable figure, and the output can be increased to almost any desired figure. The mines at present employ about fifty workmen, and the quality of coal obtained ranks with the best known in the world.

A strong company has just been formed and the property of the well-known old Tar Springs has been purchased, consisting of 360 acres. This is situated about four miles from Cloverport, and is a very valuable and beautiful property. It is not only exceedingly picturesque, attractive and healthful as a summer resort and sanitarium, but the property abounds in asphaltum rock, and will one of these days be worth untold money. The hotel on the property was destroyed by fire several years ago, but the new company propose to rebuild for next summer and establish a popular resort. The Tar Springs was formerly a great place of resort, but since the railroads were built they have been comparatively difficult of access and the patronage fell off greatly during the past 10 or 15 years. Being now within easy reach of Louisville, through the building of the new railway, they can doubtless be readily brought into prominence. The Louisville, St. Louis & Texas Railroad can take passengers from Louisville to the springs in less than three hours.

It is very much to the interest of Louisville to see every particle of development of which Cloverport is capable fully achieved. It increases the market of this city, strengthens the commercial interest in every way, and does not detract a particle from the im-

portance of the opportunities in this city. The building of the Louisville, St. Louis & Texas Railroad has certainly given Cloverport a much-needed outlet, which supplements its advantageous situation on the river, and, of course, gives it quicker communication with the outside world. The business men of that place have been aroused by the discovery of the gas and the development of their facilities by the railroads, and are moving very earnestly to secure every benefit possible from the gas. They have just organized a strong commercial club with 62 members, the president of which is the Hon. D. R. Murray, the secretary being C. W. Fowler, Esq. The very best men in the place are active members, and the organization is already taking up the consideration of important questions connected with the removal thither of manufacturing and industrial enterprises. It will be very surprising indeed if, within the next two or three years, Cloverport is not one of the most important towns on the Ohio river in Kentucky. Certainly it will be if the business men there benefit by the many great advantages which they possess and which are becoming better known every day.

The development of the oil territory in Kentucky is of sufficient importance to engage the best men in the State. The wells that have been sunk in the vicinity of Glasgow and about the head-waters of Green river are of great value, not only in the extent of flow, but in the quality of the product, which is said to be much richer and purer than any crude oil yet found in the United States. All of it is convenient to rivers, and the basis of transportation is therefore advantageous. The preliminary geological surveys in Western Kentucky made by Mr. Procter, of Kentucky, and Prof. Orton, of Ohio, have led to the belief that great fields of gas and oil will soon be tapped in that part of the State. All of this, if utilized, means not only an enormous increase of wealth and population for Kentucky, but for Louisville also. The more population in the State the more population will be necessary at its commercial metropolis to carry on the business of supply. Thus far the prosecution of search for minerals has had the most astonishing results. Sections of the State which were thought to be fit only for farming or for restricted timber supplies have yielded coals, ores and mineral deposits of various kinds that are of the utmost importance to industries. Within 35 miles of the new gas field discovered at Cloverport are the great iron ore and coal deposits at the Falls of Rough, where also the timber is of incalculable value. These facts seem to indicate that sooner or later a great industrial town will be a necessity in the vicinity. It may be Cloverport, because gas is already a certainty there, though it is possible that gas may yet be found near Owensboro or Henderson. The Green river country is rich in every variety of mineral and natural wealth.

The trouble seems to be the lack of sufficient capital in Kentucky to develop these obvious advantages. Prof. Procter, of the geological survey, takes every opportunity to advise property-owners not to make leases or sales of mineral, oil or gas lands at a merely nominal figure, because he is impressed with the fact that in a few years these resources will be vastly more valuable. Organization can effectively take the place of capital in hand in many instances, and if there was a strong and active organization of these interests in localities where they exist the necessary capital might be obtained. There may be sufficient capital already to develop, but if there is it seems to be slow about taking hold. Here in Louisville, where the Rock Gas Co. is building its gas mains with home capital, it has been a very slow and weary process. If the Cloverport discovery had been made in Indiana, it would have resulted in an im-

mediate rush to the field and in its early utilization. Capital seems to be more plentiful or at least more ready there than here. Already Kentucky companies in the Glasgow oil and gas fields have taken steps to consolidate with Cincinnati capitalists. It was necessary, perhaps, but it is unfortunate that home capital is not able or willing to utilize these great opportunities for making wealth. Kentucky will be the theater of much activity in the coming five years, and it is to be hoped that Kentuckians will make the bulk of the money that is to be made out of the development.

YOUNG E. ALLISON.

Good Crops and Prosperous Iron Market.

[Special correspondence MANUFACTURERS' RECORD.]
CHATTANOOGA, TENN., July 13, 1889.

A recent trip through the South has developed an activity that was at least partially unexpected. With the exception of a small strip through Southeast Alabama the condition of all the crops was never better than it is now. At the beginning of the season there was a scarcity of rain, which injured the stand to some extent, but since the condition of the weather has made it all up, and more, too. The average daily shipment of melons, as near as could be ascertained from interviews with the general freight agents, has been during the past week about 150 cars per day, and before the season closes will go up to 400 to 500 cars daily. So far as peaches are concerned, they will be but a small item, but millions of bushels are rotting upon the ground. There is also an increased acreage of cane through Southern Georgia, Alabama and Florida, and the foundries are full of business in making mills evaporating pans. The foundries are also feeling the impetus that is permeating general business through the South. They are now giving more orders than ever for iron, and in view of the advance in iron that is probable, many of them are contracting ahead for future delivery; in fact, the advance in iron has had a very stimulating effect on all lines of trade. The feeling of the furnace owners is now very different from what it was a month ago. To say nothing of the advance, it is impossible to purchase round lots now for future deliveries, even at the advance. Most of the furnaces have no iron to sell, their product being mostly taken up on present orders, and as for entering orders for future deliveries, they are respectfully declined, owners being satisfied with the situation and that the future will take care of itself. Upon the whole, the prospects all around were never better than now.

Compressed Air as a Motive Power.

BALTIMORE, MD., July 8, 1889.

Editor Manufacturers' Record:

It appears from an article in the Engineering and Mining Journal that compressed air is used in Paris as a motive power for sewing machines, wood working factories, printing houses and various other industries. Its use has been a great success, and in less than two years its growth has been enormous. This power in that city is cheaper than the use of gas engines. This may be a cheap, safe and reliable power for driving sewing machines, coffee mills, ventilating and cooling fans, and perhaps where greater power is required. If some of our industrial or mechanical papers or some of our engineers or mechanics who are visiting Paris would write a full history of the use of compressed air in that city, stating outlay for original plant, method of distribution; also stating the amount of power that may be furnished each consumer, and the cost of the same per horse power, it might be doing our industries a substantial service. This is in the line of thought suggested in your editorial of June 8th, relative to establishing power plants in the South.

GEO. H. READ.

The Basic Steel Process and Its Possibilities in the United States—The South's Opportunity.

In compliance with your request I submit the following notes explanatory of the difference between the Bessemer process and the basic process, and the reason why basic steel is softer and more ductile than Bessemer steel, and also my views of the possibilities of the manufacture of basic steel in the United States.

The basic process is so called because it is conducted in a basic-lined vessel and in the presence of a basic slag, while the Bessemer process is conducted in an acid-lined vessel and in the presence of an acid slag. Basic material is the oxide of metals; acid material is the oxide of metalloids.

In the practice of the Bessemer process the vessel is lined with ganister, a kind of sand rock. In making the steel a portion of this sand rock lining melts and forms a dirty slag. This old Bessemer process requires pig iron high in silicon, because there is no extraneous fire in or around the converter, and the heat necessary to keep the metal fluid while being treated must be developed by burning something out of the metal, and, as the combustion of silicon develops a large amount of heat, Bessemer pig iron is made high in silicon in order to develop heat while burning it out in the converter. In converting the metal into steel this silicon is changed to silica, (sand,) which unites with the slag, making it dirtier still. The Bessemer process is thus inseparably connected with, and the Bessemer steel is converted in the presence of and mixed with, a dirty slag. The steel so made always contains all the phosphorus contained in the pig iron, fuel and fluxes from which it was made and a considerable quantity of silicon and other impurities taken from the dirty slag. These impurities tend to make Bessemer steel hard and brittle.

In the practice of the basic process Bessemer dirt lining, called ganister, is not used. I line the vessel with lime, magnesite, chrome ore, or other basic material, so that no dirt is brought in contact with the metal from the lining. The blast furnace is worked in such a manner as to produce pig iron for use in the basic process low in silicon, and by this means we avoid making the dirty slag in the converter that the acid process does in burning out a large amount of silicon. In order to develop the required heat in the basic converter we make the pig iron high in phosphorus, and by burning the phosphorus into phosphoric acid we not only develop sufficient heat, but the metal is cleansed of all its impurities, and a sufficient amount of that valuable fertilizer, phosphate of lime, is produced to reduce the cost of converting in a large degree. Thus, by working the metal in a vessel having a pure lining and a pure basic slag, a purer and consequently a softer and more ductile steel is produced than can possibly be made by the Bessemer or by any other process where a silicious dirty slag is produced and maintained.

The basic process may be practiced in different ways. When practiced in a basic-lined Bessemer converter it is called the basic Bessemer process, and requires a metal containing not less than 2 per cent. of phosphorus and less than 3 per cent. of silicon; preferably 3 per cent. of phosphorus and less than one-half of one per cent. of silicon. The time required in making a heat is twenty minutes; in other words, ten tons of cast iron may be cleansed of all its impurities and converted into soft steel of great ductility in that time.

When the basic process is conducted in a basic-lined open hearth it is called the basic open hearth process, and may be practiced on metal containing phosphorus in all degrees from .05 to 5 per cent., and

silicon in all degrees; preferably with phosphorus from 2 to 3 per cent. and silicon below .50 per cent. In the basic open-hearth process all grades of pig iron and of scrap iron or scrap steel may be used and a purer and better steel produced than can be made by the Bessemer converter or the acid open-hearth. The steel produced by the basic open-hearth requires from 7 to 12 hours to a heat, and will cost about \$2 per ton more than that made by the basic converter, but the quality of the basic open-hearth steel is superior to the steel made by the basic converter.

The basic duplex process consists in blowing molten metal with an air-blast while held in an acid-lined converter until the silicon is eliminated and the carbon is reduced to about one-half of one per cent., then transferring the desiliconized metal (minus the slag) into a basic-lined open hearth, and there boiling out the carbon and dephosphorizing the metal in the presence of a basic slag. This process will work metal of any and every quality. If the metal is high in silicon the silicon is removed in the acid lined vessel and the phosphorus and carbon in the basic-lined vessel, so that the silicic acid or dirt formed in the elimination of silicon will not be present in the dephosphorizing period, and a purer metal will be made than by either the basic Bessemer or the basic open-hearth process. The time required to make a heat by the basic duplex process is from three to four hours, the expense of converting being about a dollar a ton less than by the basic open hearth and a dollar a ton more than by the basic converter.

It will thus be seen that in the invention of the basic process I have adapted it to the use of every quality of iron ore, and every quality of pig metal, cast iron scrap, and wrought iron or steel scrap known to exist in this country. It is also adapted to the production of every grade of steel made by the old processes, and in addition produces a metal chemically purer and physically more ductile and tough than can be made by any of the old processes.

The basic Bessemer process may be practiced to advantage at Pottstown, Harrisburg, and at Pine Grove, Pennsylvania; at Waynesboro, Green Forest, Roanoke, and New River, Virginia; at Knoxville, Athens, Cleveland, and Chattanooga, Tennessee; from Dalton to Rome, in Georgia, and from Rome to Birmingham, in Alabama; on Lake Champlain, New York; at Portsmouth and Moxahala, Ohio, and in many other places where metal containing from 2 to 3 per cent. of phosphorus can be made to advantage. Milwaukee, Wisconsin, is especially adapted to this process, there being a bed of iron ore 15 feet thick within 50 miles of the city, which contains 54 per cent. of iron and 1.53 per cent. of phosphorus.

The basic open-hearth process may be practiced at all points in the United States where the acid open-hearth process is practiced. At Pittsburgh, Pa., Messrs. Carnegie, Phipps & Co., Limited, are making all their purest and best plate steel by means of this process. The Pennsylvania Steel Co. has also adopted this process.

The basic duplex process may be practiced to advantage at Pittsburgh, Harrisburg, and in Eastern Pennsylvania; at Richmond, Lynchburg, Low Moor, Milnes, Roanoke and Pulaski, in Virginia; from Knoxville to South Pittsburgh, in Tennessee; and at all points where pig iron can be made to advantage in Alabama and Georgia. It is especially adapted to make steel from the pig iron made at Bessemer, Birmingham, and Sheffield, Alabama.

In the Bessemer process, whether it be the acid or the basic, the metalloids are eliminated by being oxidized by means of the oxygen of the air; while in the basic open-hearth process, as well as the acid open-hearth process, the metalloids are

eliminated by means of the oxygen in metallic oxides; and as the oxygen of the air is mechanically combined, while the oxygen of the metallic oxides is chemically combined, the product of the open-hearth process is purer and of a more highly chemical character than the Bessemer metal.

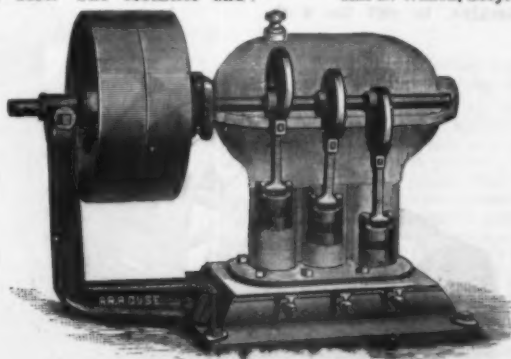
Owing to litigation the introduction of the basic process has been delayed in the United States, but in Europe it has been largely adopted, the production of basic steel there in 1888 having been 1,953,234 tons, a considerable portion of which was exported to this country. The litigation is now at an end. I have assigned the basic patents to the Bessemer Steel Co., Limited, but have retained the patents covering the manufacture, sale and use of the basic slag as a fertilizer.

Basic steel is in great demand for tin-plates, thin sheets for stamping into trays, and domestic utensils, such as enameled and nickel-plated ware for wire-drawing, and drop forgings, because it is softer, tougher and ductile than the less pure steels made in the presence of dirty slag. It is also used largely for wire nails, boiler plates and rivets, because of its homogeneity and toughness.

It is my impression that the acid process has seen its largest development in this country, and that the future increase of steel production will be largely, if not entirely, due to the development of the basic process, because by its use a purer and better metal may be made. In my opinion the greatest development of the basic process will be in Alabama, Virginia, Tennessee, West Virginia, Kentucky, North Carolina and Georgia. I am also of the opinion that steel sheepbuilding will be an important industry in the South within a few years, as all the material needed for the construction of steel-bottomed ships can be delivered to a shipyard at Pensacola, Florida, cheaper than such material can be bought at any point on the Delaware river.—Jacob Reese in the Bulletin of the Iron & Steel Association.

The Rouse Power Pump.

The accompanying illustration is of a power pump with 3 8-inch cylinders, making it triplicate in action, the stream of water positively unvarying and three times the capacity, it is said, of one cylinder same size or bore. The eccentric and



THE ROUSE POWER PUMP.

steel shaft is made very strong; it can be run very fast, or slow, and it is a powerful pump for fire protection; 100 to 150 revolutions per minute is about the speed to run; it will throw from one gallon to 100 per minute, according to speed. The crank can be put on the pump by hand power. Mr. R. R. Rouse, Indianapolis, Ind., is the manufacturer.

BUILDING SUGAR MILL—KISSIMMEE, FLA.
July 11, 1889.—I am erecting a sugar mill at St. Cloud; capacity 6,000 lbs. centrifugal sugar per day; open pan, steam clarifier and steam strike pan, 60 horse-power engines and boilers. Cost is about \$10,000.

R. E. ROSE.

TOBACCO CURING AND LUMBER MILL.
NEW YORK, July 11, 1889.—We shall put in large steam plant for heating and curing our tobacco; plant at Lakeland, Fla.; also various kinds of machinery for getting out lumber and dressing it, saw mill, &c., steam boilers, piping, etc.

CHAS. S. PHILIP, Pres.

TO BUILD TANNERY—TALLADEGA, ALA.
July 11, 1889.—The Talladega Tanning Co. has been organized with capital stock of \$6,000. G. A. Joiner is president. The Company will build tannery at once. We will purchase the usual machinery needed in institutions of this kind. Parties having machinery to sell might do so by corresponding with the president, Mr. G. A. Joiner.

SYDNEY J. BOWIE.

TO BUILD OIL MILL AND FERTILIZER FACTORY—CORDELE, GA.
July 11, 1889.—We contemplate building an oil mill and fertilizer factory combined. Would be pleased to have quotations for machinery for same.

CORDELE GUANO CO.

J. B. SCOTT, Pres.

COTTON FACTORY PROJECTED—HARDEN, N. C.
July 12, 1889.—We are trying to organize a company to build a carpet yarn mill. We want a capital stock of \$45,000 to begin with. Will use water power and will want machinery for mill.

O. D. CARPENTER.

NEW FOUNDRY TO BE BUILT—GREENSBORO, N. C.
July 10, 1889.—We propose building a new foundry soon, and will probably buy a set of stove patterns.

EAGLE FOUNDRY CO.

TO START ASPHALT WORKS—MACON, GA.
July 12, 1889.—We propose adding a plant for the manufacture of asphalt and crushed granite paving blocks and want to communicate with parties having this kind of machinery.

T. J. GARLING & Co.

TO BUILD PLASTER WORKS—NORFOLK, VA.
July 13, 1889.—The Tennessee Adamant Wall Plaster Manufacturing Co. will be operated in Nashville, Tenn. We will try to rent power, but will buy mixing machines, sand dryers, belting, shafting, etc. Expect to be in operation September 1.

IRA B. WHITE, Secy. and Treas.

TO START WOOD WORKING FACTORY—WILMINGTON, N. C.
July 10, 1889.—We have organized the Industrial Manufacturing Co., and we propose to carry on the manufacture of the following articles: Wooden butter dishes, berry baskets and crates, egg crates, tobacco boxes, shuttle blocks, kindling wood, excelsior, shingles. We will also want an engine and boiler about 30 to 40 horse-power.

E. F. JOHNSON, Sec'y and Treas.

CAR SHOPS TO BE BUILT—BAINBRIDGE, GA.
July 12, 1889.—We propose erecting car shops at Troy, Ala.

ALABAMA MIDLAND RAILROAD CO.

J. W. WOOLFOLK, Pres.

New No. 2 Improved Universal Wood-Worker.

We give an illustration of a new No. 2 universal wood-worker, with four-sided slotted steel vertical jointing head, having all the advantages of adjustment and conveniences of the builders No. 1 machine, and, in addition, has the upright head, so

and made perfectly true for jointing up glued stock. Either table can be raised and lowered independently of the other, or both can be raised and lowered together, either on a circle of the head or straight up and down. All these adjustments are made from the working side of the machine.

The patent beveling fences are entirely

of boring, routing, rosette making, etc. For further information address the builders, the Egan Co., Nos. 228 to 248 West Front street, Cincinnati, Ohio.

Improved Felly or Rim Planer.

The attention of manufacturers of buggy wheels is called to a newly designed felly

raising and lowering of their housings.

The strongly geared and perfectly parallel feed can be quickly adjusted, so that the center line of the feed roll will point directly to the center of any diameter of wheel, of which the felly operated upon forms a part. In other words, it grips the felly in the true radial line of its circle, and feeds it accurately in that line, thus preventing undue friction on the guides, which in other planers of this class prevents the free feeding of the material and causes frequent stopping.

The two horizontal mandrels are long, and the mandrel bearings well spread apart. They rest directly on the heavy bracket supports, one only being shown in the cut.

The housings are arranged on a special bed plate, on which they can be set to any required angle or bevel of the felly, in accordance with a scale placed in the bed plate. The bed plate raises and lowers in a true vertical line, by means of a crank and screw on the bracket.

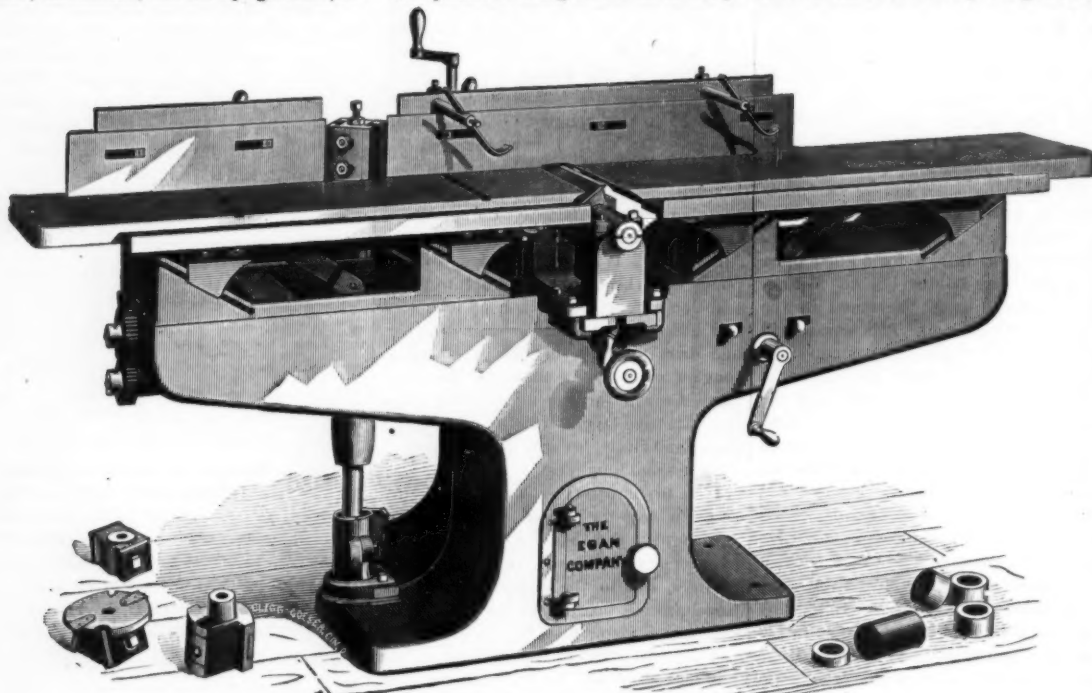
It will be seen that the housings thus arranged do not require resetting for bevel or angle, but that they retain the given angle for wide or narrow fellies, unless a change in the bevel is desired.

The table back of the lower cutterhead is arranged with strong slides on the lower bracket, and can be raised and lowered in accordance with the depth or thickness of cut.

The side or vertical cutterhead housings are so arranged that the outside cutterhead planing the inner side of the felly remains fixed, while the inside head planing the tread of the felly, can be adjusted in an instant for thickness. The hand wheel shown in front operates the two screws for sliding the inside mandrel in and out.

This arrangement of the cutterheads requires no readjusting of the guides, as they remain in line with the stationary head.

The machine is provided with adjustable guides, supports, bonnet and springs.



NEW NO. 2 IMPROVED UNIVERSAL WOODWORKER.

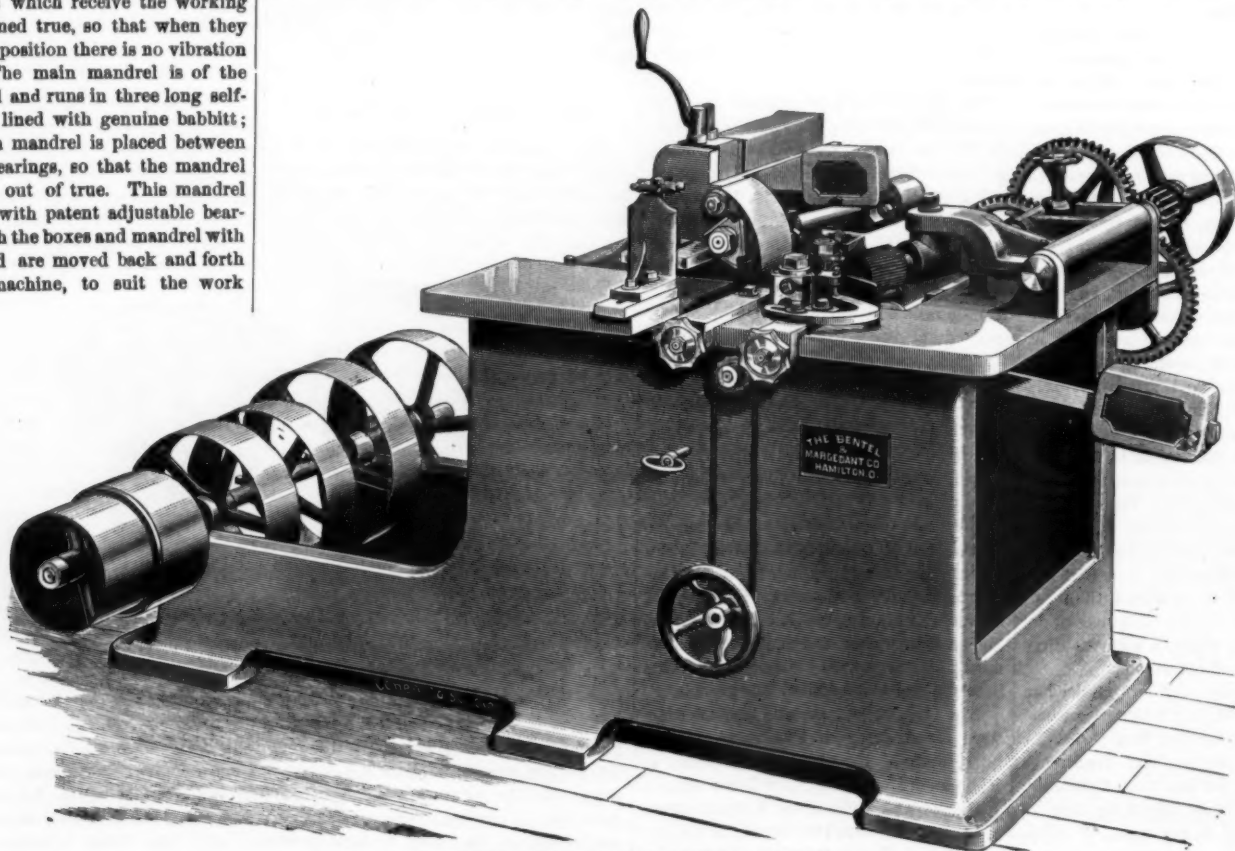
that two sides of the stock may be dressed at one time, and in squaring up or planing out of wind the edge can also be jointed.

The column is a cored casting having a broad base, securing a good floor support. The portions which receive the working parts are planed true, so that when they are bolted in position there is no vibration whatever. The main mandrel is of the best cast steel and runs in three long self-oiling boxes lined with genuine babbitt; the pulley on mandrel is placed between two of the bearings, so that the mandrel will not get out of true. This mandrel is also fitted with patent adjustable bearings, by which the boxes and mandrel with head attached are moved back and forth across the machine, to suit the work desired.

new, one being placed over the main head and before the jointing head; both are made in two parts, and are made to bevel. They may also be moved across the full width of the table. By an ingenious

planer herewith illustrated.

The peculiar requirements of a machine to adapt it to the planing of rims of wheels of various diameters on four sides at one operation, straight or beveling, necessitates



IMPROVED FOUR-SIDED FELLY OR RIM PLANER.

The upright mandrel is of steel and runs in journal boxes connected to the column; it carries a four-sided slotted steel head and is driven from the same counter-shaft that drives the main mandrel. The jointing head can be easily removed when it is desired to use the full width of the tables for gaining, sawing, etc.

The tables are of extra length and width

arrangement, when the fences are beveled, the lower part is always close to the table having no forward motion. This great convenience will no doubt be appreciated by all operators.

The boring attachment on reverse side of machine is of the same general character as that on the No. 1 machine, having all the necessary adjustments for all kinds

a very different construction from that required in ordinary planing.

Doing smooth and uniform planing, it feeds continuously and without splintering or gouging the ends of the fellies.

The changes to adapt it to various diameters and thicknesses are quickly made, while the bevel given the horizontal cutterheads can be accurately retained in the

Each cutterhead is driven by its own belt, and the shifter for the feed belt is within easy reach of the operator.

The frame of the machine is strong heavy and well designed, provision being made on the opposite side for the removal of shavings should they accumulate inside.

The weight of the machine complete is about 1,600 pounds. The Bentley & Margdant Co., of Hamilton, Ohio, are the manufacturers.

NEW DECATUR

ALABAMA

The New Industrial City of the Great Tennessee Valley.

DESCRIPTION OF ENTERPRISES ALREADY ESTABLISHED:

The Louisville and Nashville Railroad Company

have completed the erection of their new central machine shops and car works at Decatur, Ala., at a cost of about \$300,000, on a plot of ground of fifty-seven acres donated to the company for the purpose by THE DECATUR LAND, IMPROVEMENT AND FURNACE CO. The buildings comprise a machine shop, blacksmith shop, boiler shop, boiler and engine house to supply power to above buildings, foundry, wheel shop, oil house, round house, freight car shops, dry kiln, planing mill and carpenter shop, boiler and engine house for the wood-working establishments, passenger car shop, paint shop, two-story and basement office building and various smaller structures. All these are brick buildings of the most substantial character.

The plans and designs were made by, and the work carried out under instructions of Mr. Middleton, the railway company's superintendent of machinery, who had made the plans for the machine shops of several of the largest railway systems of the Northwest. Only a small force will hereafter be kept at the company's old shops at South

Nashville and at Birmingham, for ordinary repairs. The new establishment at New Decatur will be the central shops for all the lines of the system from Memphis Junction, Ky., south to New Orleans. They are intended, primarily, for repairing locomotives and freight and passenger cars. They are, however, equipped to build new locomotives and freight cars, and whenever repair work is slack the hands will be employed on new work. The force at present employed numbers about 300 mechanics, but by the time the establishment is brought into full swing probably double that number will be kept on the company's pay roll; and when the buildings are enlarged, for which provision has been made in the plans and construction, the number will be increased to 1000.

Mr. W. P. Pike, who was formerly in charge of the Nashville shops, has been appointed master mechanic and Mr. M. K. Barnham, lately with the Erie railroad at Salamanca, N. Y., has been appointed general foreman.



NEW SHOPS OF THE LOUISVILLE AND NASHVILLE RAILROAD CO.

DESCRIPTION.

The **MACHINE SHOP** is in a building 125 by 127 feet, which may be enlarged to double its size—that is, 250 by 125, whenever required. There are six pits for planing locomotives for repairs, and in addition to these two more pits may be used for the same purpose in the round house, so that eight locomotives can be taken in hand at the same time. The machinery in this building consists of six lathes, besides a wheel lathe already in position, and four additional lathes to arrive; a driving wheel press, a rotary turning machine, a cylinder boring machine, by the Potts Machine Company, of Wheeling, W. Va.; two slotters, by the Niles Tool Works, of Hamilton, O.; a radial drill, by the Pond Machine Tool Company, of Plainfield, N. J.; a double headed planer and a two-point rotary turning machine, by the same company, besides a variety of smaller machinery. All the machinery is placed on large stone slabs on brick foundation.

The **BLACKSMITH SHOP** and **BOILER SHOP** are in a building 228 by 92 feet. In the blacksmith's department are 24 forges and two steam hammers, a bolt header and two bolt cutting machines. The draught for the forges will be supplied by a fan, which draught can be cut off as desired from any forge. In the boiler shop is an engine and punch.

The **BOILER** and **ENGINE** are in a separate house. The engine is a 200 horse power machine, by C. H. Brown, of Fitchburg, Mass., with a 14-foot fly wheel. The boiler is from the Phoenix Iron Works, of Meadville, Pa., and is 30 feet long. There is room in the building for additional boilers, should they be needed. Should the exigencies of the service demand it, the whole of this building can be given up to the blacksmiths, and a separate boiler shop be erected on a vacant plot of ground adjoining. Between the machine and blacksmith shops is a 60-foot wide traverse table of 244 feet travel, which also can be extended whenever the machine shop is enlarged.

The **FOUNDRY** is 84 by 92 feet, and is fitted up with a cupola of 30 tons capacity. Outside the building is a core oven. The brass casting department will, for the present, take up a corner of the foundry, but later on a separate building will be erected for it.

The **ROUND HOUSE** has at present twenty stalls. It is eventually to make a complete circle, when there will be sixty stalls for locomotives. The building is fitted up with a small engine, a drill press, lathe and small shaping machine, to carry on repairs at any time when the large engine may not be working.

There is a separate **WHEEL SHOP**, 83 by 51, for boring and mounting car wheels; it is provided with suitable machinery. The wood-working departments are entirely separate from the machinery and iron departments.

The **PLANING MILL** is in a building 123 by 73 feet and two stories high. The machinery is on the lower floor, the upper floor being used as a carpenter shop. The machinery has not all been erected yet, but includes at present a long planer for car sills, etc., a planer by London, Berry & Orton, which planes four sides simultaneously, also two tenoning machines, a cross graining and grooving machine for heavy work, two boring machines, a mortising and boring machine, and a pony band saw.

The engine and boiler for the wood-working department were moved here from the South Nashville shops. There is a **LUMBER YARD** near the planing mill in which the company propose keeping, on an average, about 5,000,000 feet of lumber of all sorts. Adjoining the lumber yard is a **DRY KILN**.

The **FREIGHT CAR SHOP** is a building 143 by 120, and has accommodation to build or repair eighteen cars at one time. The **PASSENGER CAR SHOP** is 107 by 92 feet, and affords accommodation for five passenger coaches at one time. The **PAINT SHOP** is of the same size as the passenger car shop. Between the two last-named buildings is a 60 foot traverse table of 253 feet travel.

The **OFFICE BUILDING** is 50 by 75 feet, and has two stories and basement. The basement will be used as a store-room for heavy goods. The offices of the master mechanic and the clerical establishment are on the main floor; the upper floor will be the general store room.

Near the machine shop a well of 40 feet diameter is being dug. In the meantime a supply of water is obtained from an artesian well 120 feet deep. There are two tanks on a high staging between the machine shop and the main line, one tank over the other. The lower one is for ordinary use and has a capacity of 47,000 gallons; the upper one contains 8,000 gallons, and is reserved especially for service in case of fire.

The **OIL HOUSE** is in a separate building. It contains nine large tanks, each 8 feet diameter and 3 feet deep, which are filled from the outside. The oil is drawn, as required, from pipes connecting with each tank in a closed room, where are also the bins for the waste cotton.

For Maps, Pamphlets and other Information about New Decatur, address

The Decatur Land, Improvement & Furnace Company, New Decatur, Alabama.

SHEFFIELD, ALA.

The Iron Manufacturing Center of the South.

At the head of navigation, on the Tennessee River, Sheffield is the natural outlet for the mineral and manufacturing products of Alabama and the neighboring States seeking a water route to points on the Ohio and Mississippi Rivers, and to the Gulf of Mexico, as well as the best distributing point over Alabama, Eastern Mississippi and East Tennessee, South Carolina, Georgia and Florida for Northern and Western produce, groceries, provisions, machinery, &c. Three Railroads already completed and in operation, and several others assured. Principal shops of the Memphis & Charleston Railroad, in which cars and locomotives are to be built, are under contract to be erected here. These will employ between four hundred and five hundred mechanics, and consequently, with their families, will make an increase in population of at least two thousand people. Shops of three other railroads are contracted to be located here, some of them being now under construction.

Five Completed Blast Furnaces,

HAVE A CAPACITY OF 700 TONS PIG IRON PER DAY.

Experts do not hesitate to say that iron can be manufactured more cheaply at Sheffield than at Birmingham, and its river transportation facilities will enable Sheffield iron to reach the principal markets at a saving of from

\$2.00 TO \$2.50 PER TON.

The quality of the iron produced is pronounced by consumers to be the best from any furnaces in the South.

The following are among the Corporate and Private Enterprises belonging to Sheffield:

- | | | |
|--|--|--|
| 1 The Sheffield Land, Iron & Coal Company, capital \$1,000,000. | 14 The Sheffield Mineral Paint Company, \$50,000. | 35 Knowles Knitting Mill, \$30,000. |
| 2 The Sheffield & Birmingham Coal, Iron & Railroad Company, capital \$7,500,000, owners and operators of three blast furnaces, the Sheffield, the Sheffield & Birmingham Railroad, coke ovens and coal mines near Sheffield. | 15 The Sheffield Agricultural Works, \$40,000. | 36 Sheffield Tapestry Works, \$40,000. |
| 3 The Sheffield Furnace Company, capital \$150,000; assets \$500,000. | 16 The Sandstone Quarry Company. | 37 Robbins Machine Shop and Foundry, \$50,000. |
| 4 The Lady Ensley Furnace Company, capital \$200,000. | 17 The Sheffield Cotton Compress Company, \$60,000. | 38 Sheffield Cotton Mill, No. 1, \$50,000. |
| 5 Enterprise Publishing Company, capital \$25,000; publishes daily paper with associated press report and weekly paper. | 18 Millar Brothers, Steam Laundry. | 39 Owen Pink Mixture Company, \$100,000. |
| 6 The Electric Light and Gas Fuel Works, \$25,000. | 19 Water Works, already expended \$30,000. | 40 Bell Telephone & Telegraph Company. |
| 7 The Sheffield Ice Company, capital \$25,000. | 20 Sheffield Street Railway Company, \$50,000. | 41 Fould's Shoe Factory, \$20,000. |
| 8 The Sheffield Manufacturing Company, \$30,000. | 21 Sheffield & Tuscumbia Street Railway Co., \$50,000. | 42 Enterprise Wood-working Company, \$30,000. |
| 9 The Sheffield Contracting Company, \$60,000. | 22 First National Bank, \$100,000. | 43 The Sheffield Harness & Saddlery Company, \$20,000. |
| 10 The Eureka Brick & Lumber Company, \$30,000. | 23 Cleveland Hotel Company, \$50,000. | 44 Principal Shops of the Sheffield & Birmingham R. R. |
| 11 The Sheffield Furniture Manufactory. | 24 Sheffield Hotel Company, \$120,000. | |
| 12 The Howard & Busch Brick Company. | 25 East Sheffield Land Company, \$500,000. | |
| 13 The Sheffield Bakery and Bottling Works. | 26 Hull & Keller's Fern Quarries. | |
| | 27 Vorhees' Galvanized Iron Cornice Factory. | |
| | 28 The Sheffield Quarries. | |
| | 29 Mobile Real Estate Company, \$50,000. | |
| | 30 Sheffield Real Estate Company, \$125,000. | |
| | 31 Sheffield & Mobile Improvement Company, \$100,000. | |
| | 32 Sheffield Stove Works, \$50,000. | |
| | 33 Henderson Milling Company, \$100,000. | |
| | 34 Globe Iron & Brass Works, \$10,000. | |

Aside from the foregoing, the following are in course of construction and may be considered positive: Principal Shops of the Nashville, Florence & Sheffield Division of the Louisville & Nashville Railroad.

Reasonably certain to be secured in the near future are the following, in regard to which negotiations are pending: A Rolling Mill, a Large Machine Shop, a Cotton Mill, a Large Steel Plant.

GOOD WATER.

Free Public Schools and Churches

Drainage Excellent. Health and Climate Unsurpassed.

Splendid Opening for Men of Push and Energy.

No Better Point for Profitable Investment.

— NO "OLD FOG" ELEMENT HERE. —

Sites for Manufacturing Enterprises,

AND FOR FREE PUBLIC SCHOOLS AND CHURCHES,

Donated by Sheffield Land, Iron & Coal Company.

Population January 1st, 1887, 700; August 21st, 1887, by actual count, 2,583. Increase of population, 300 per cent. in eight months, and only limited by accommodations. Present estimate (August, 1888) fully 3,500. Four years ago the site of Sheffield was cultivated as corn and cotton plantations, and was without a railroad. Numerous two and three story brick business houses, and one and two-story dwellings have been, and are being erected. The class of buildings will compare favorably with those in cities of 20,000 inhabitants. Limestone of excellent quality for fluxing iron in unlimited quantities at the furnaces' sites. First-class building stone and brick clay abundant. Rich and extensive deposits of Brown Hematite iron ore within twenty miles, along the lines of two Sheffield railroads, which, by actual results in the furnaces, yield above 50 per cent. metal. Iron of high grade is being made with a pound of coke to a pound of metal—a result never before accomplished with Southern ores and coke. The Sheffield & Birmingham Railroad runs through the heart of the Warrior Coal Fields, which abound in first-class Coking, Steam, Gas and Grate Coal. Timber is abundant and cheap. The Memphis & Charleston Railroad, Sheffield & Birmingham Railroad, and Nashville, Florence and Sheffield branch of the Louisville and Nashville Railroad are now in operation into Sheffield. Surveys of three other railroads have been recently completed to Sheffield, which will soon be the best combined river and railroad transportation center in the South. Every merchant and every established manufacturing enterprise is doing a profitable business. More are needed. For further information address

WM. L. CHAMBERS, Vice-President and Manager,

SHEFFIELD LAND, IRON & COAL COMPANY, - - - SHEFFIELD, ALA.

SOME ABOUT FLORENCE, ALA.

FACTS

Florence is in North Alabama, near the Tennessee line, on the Tennessee river, which is navigable here for large steamers. It is on the Memphis & Charleston Railroad, and the Nashville & Florence branch of the Louisville & Nashville Road.

There are many other places in the South possessing the advantages of a good climate, healthfulness, natural resources and manufacturing capabilities more happily combined and in a higher degree than can be found in any other part of the country. It is believed, however, that at no point in the South, and hence nowhere in America can there be found an aggregate of so many unsurpassed advantages and attractions as exist at Florence.

Florence can make iron as cheaply as any place in Alabama. It has facilities for the manufacture also of cotton goods equal to those of any other place. Anything that uses wood as a raw material can be made here at as low a cost as anywhere in the South.

Thousands of acres of iron ore of a high grade within a few miles of Florence are owned by Florence companies. Limestone is quarried within the town limits. There is enough of it to last for ages.

Cotton mills would get a large part of their supply from the country around Florence. Cypress creek furnishes water power and mill sites enough to make Florence the Lowell of the South.

North of Florence, and up the Tennessee river, there are large areas of timber, embracing a wide variety of hardwoods—forests that the ax has never touched.

Besides its industrial possibilities, Florence is a point of great commercial importance, and could be made the center of an enormous mercantile business. It has the advantage of both rail and river transportation and of competing railroads. Certain railroad movements are in progress now that will give it direct communication in every direction and by different lines.

Florence is surrounded by a wide extent of fertile and productive country, as well adapted for farming, stock raising, fruit growing, truck farming, dairying, &c., as any in the world. Further, it has a climate that is delightful the year round. Its health record cannot be surpassed. It has no malaria. In fact, people who live here enjoy a remarkable exemption from ailments of every sort. It has an abundance of the purest water.

For beauty of location Florence is without a peer. The Tennessee river at this point is as romantic and beautiful as the Hudson. The rolling character of the country, the slopes and hills and alternating valleys furnish a picture to charm an artist's eye. The lovely Cypress creek, a deep and rapid stream emptying into the river just below the town, presents at every turn in its tortuous course a scene of entrancing beauty. The views from some of the higher hills are as fair as the eyes of man ever rested on.

Florence is making more rapid progress, proportionately, than any other town in America. This is a strong statement but it is true. And its growth is on a solid and permanent basis.

Florence is not undergoing any wild real estate boom. Its managers are not seeking to advance real estate prices. It is not their plan to get a quick return for the money they have invested, by the rapid sale of lots at unnatural prices. It is their aim to first build up a town, to locate factories and secure a permanent population, when land will have an actual value and sell at prices from which there will not be a subsequent disastrous reaction. At present real estate is much lower in price than in any other town in the South that has made half the progress Florence has made.

Since the first of September, 1888, over 25 industries have been located at Florence, with an aggregate cash capital exceeding \$2,000,000. This remarkable growth is the result of efforts to induce people to simply investigate the attractions of Florence. Investigation and comparison with other places, on the part of any who are looking for a place in the South to locate, will in nearly every case result in the selection of Florence.

The following are some of the industries in Florence. Some of these are in operation; others are nearly ready for work and others have but recently commenced work on their buildings: A furnace about ready to go into blast, and another partly constructed; a stove factory; a hardware company, with a capital of \$300,000 to manufacture fine building hardware, &c.; a wagon factory, with capital of \$150,000; an agricultural implement works; a handle factory; a woodenware factory; a sash, door and blind factory; a cedar bucket factory; a pump factory; planing mills; a factory to make wooden butter plates such as grocers use; a flour mill; a cotton mill; a jeans factory; a gingham factory; a woolen mill; a cotton gin; a marble company; a roofing and paint company; a shoe factory; a suspender factory; a compress, packet and ferry company; three building and loan companies; a canning factory; several brick factories; a dummy railroad company, and several other enterprises.

The aggregate capital of the industrial, mercantile and development enterprises in Florence exceeds \$15,000,000.

A year ago the population of Florence was 2,000. It is now more than 8,000.

There are more than 1,100 carpenters at work in Florence and they can't build houses fast enough to keep up with the increase in population. Before the first of January next there will be 15,000 people living here.

Limited space allows here only the briefest summary of a very few of the more important facts about Florence. For more detailed information write to any of the following companies. Or better still, come down and see for yourself. Investigation is all that Florence asks or needs.

Railroad and Improvement Co.

Lauderdale Manufacturing Co.

Cotton and Iron Co.

Florence Investment Co.

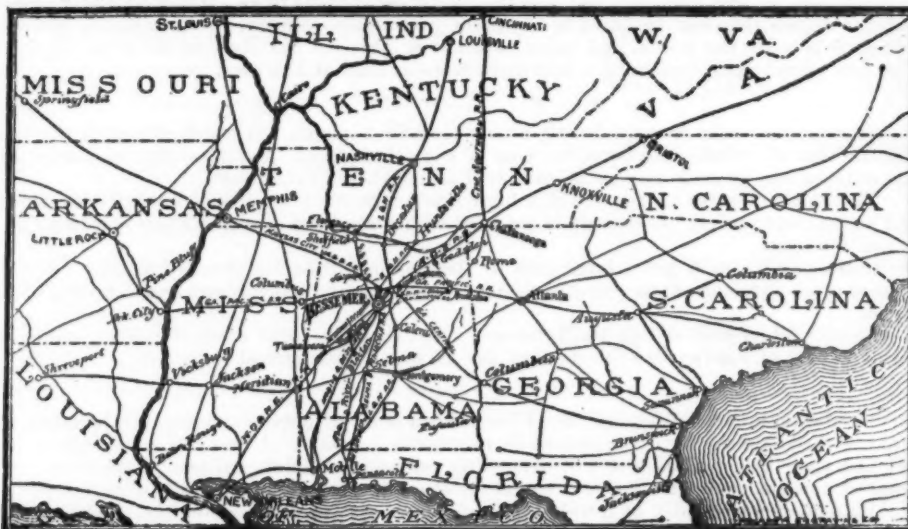
The Bessemer Land & Improvement Company,

Office-Nineteenth Street, next to the Bank of Bessemer.

ITS TRANSPORTATION ADVANTAGES.

In an area of four blocks nine lines of railways center: The Queen and Crescent Route; The Louisville & Nashville Min'l Line; The Bessemer & Huntsville R. R.; The Georgia Pacific R. R.; The Kansas City, Memphis & Bessemer R. R.; The Bessemer & Tuscaloosa R. R.; The Bessemer Dummy Line (standard gauge). All of these lines are running to Bessemer. The Bessemer & Huntsville is completed as far as Village Springs, forty miles on the way up Murphree's Valley, with its ultimate terminal point at Huntsville. It is being rapidly extended. The Bessemer & Tusca-

loosa is completed to Woodstock, a distance of thirty miles, lacking only eighteen miles of reaching Tuscaloosa. At Woodstock this line connects with the Blocton Coal Mines Railway. The lines of the Bessemer, Selma & Pensacola R. R. and Mobile & Bessemer R. R., now under contract and in process of construction, both center in this area. The Sheffield & Bessemer R. R. is projected to Bessemer. It is now built as far as Jasper, forty miles northwest of Bessemer.



Some Facts About Bessemer, Alabama.

Founded April 12, 1887.

In all the world there is no spot where the economic conditions of iron making are so perfectly and practically combined as at this city of Bessemer, Alabama.

Upon this fact was based the origin of Bessemer; upon this fact depends its present existence and all its future possibilities. Men may come and men may go, but the fact remains that North Alabama is the great storehouse of iron and coal in North America, and Bessemer is its natural center of production and practical, common-sense business men have shown their faith in it by the investment of millions of dollars and the creation of industries that give employment to thousands and furnish the means of comfort and happiness, of education and refinement to many homes.

Situated in the foot hills of the Apalachians in a beautiful valley, well watered and timbered, bordered on the northeast by the Button Mountains, locally known as the Red Mountains, and on the northwest by the Rock Mountains. It is but three miles as the bird flies across the valley from mountain to mountain. On the one side are the great Warrior coal fields, on the other an inexhaustible supply of iron ore, while in the valley between, the Trenton limestone crops vertically. Half way between the Ohio River and the Gulf of Mexico, remote from the rigors of the Northern winter, equally exempt from the heat of the low lands of the Gulf Shore, secure by its mountain elevation from the dreaded scourges of the tropics, with a pure, dry, bracing atmosphere, surrounded by an excellent grazing country where stock can be kept all winter without housing, where cotton and corn can be profitably raised, where the peach, the apple, the pear and the plum thrive, where grape culture on the sunny slopes of the hills is soon to become a special industry. The Northern visitor to this favored locality in February leaves behind the blizzard and dreary expanse of snow-covered country to find the fruit trees in bloom, the ground carpeted with green, the wild flowers in bloom and the birds singing merrily in the woods, while from the depths comes the never-ceasing, inexhaustible tribute of coal and iron to reward the industrious worker.

Scarcely two years have elapsed since a leading capitalist at Birmingham sold his furnace and mining interests and immediately projected a magnificent furnace plant on the site of what is now Bessemer, at the same time developing ore and coal mines. He

simply went to the source of supply, for it is well known that Bessemer supplies three-fourths of the iron ore to the Birmingham district and Chattanooga. The establishment of rolling mills and kindred industries immediately followed, and two years ago the city was projected.

The result is perhaps without parallel in history and without a personal visit and inspection will almost stagger belief. In two years there has grown up a bustling little city of nearly five thousand inhabitants and nearly seven hundred substantially built brick and frame houses. Nine lines of railway, four passenger depots, two hotels of architecture, design and finish that would be a credit to Chicago, blocks of brick and marble front stores that would not be out of place in New York; seven churches, a handsome public school building, the most extensive rolling mill in the country; five furnace plants, two in operation, the others under rapid construction, electric light, ice works, planing mills, fire-brick and terra cotta works, two foundries and three brick yards, water works with ample supply of mountain spring water for a large population.

It is no wonder that capital and immigration have been attracted to a scene of such unparalleled development and industry, and it is safe to say that nearly if not quite ten millions of dollars have already been invested at Bessemer.

The policy of the Bessemer Land & Improvement Company, which projected this city, has been to build the city gradually and substantially and upon a firm and enduring basis. With this policy steadily in view the company has never promoted nor has it participated in any speculative movements, but it has extended the broadest encouragement to immigrants and has made substantial inducements to the projectors of new enterprises.

The result is already apparent in new enterprises in operation which give employment to skilled workmen, and so lay the foundation of new homes. With the attention of the people in the Northern States of the Union directed to new fields of industry and the founding of new homes in which to work out prosperous careers, we extend an invitation to all to visit us and personally examine these advantages.



CHARLESTON BLOCK, 300 FEET FRONTAGE, 2D. AVE., BET. 18TH AND 19TH STREETS.

For particular information as to price of lots, manufacturing sites and inducements to establishing plants in this unrivalled locality, address

H. M. McNUTT, Secretary.

H. M. McNutt
President.

200,000,000 TONS OF BROWN IRON ORE

IN SIGHT AT

BLUFFTON,

HIGH, HEALTHY AND HONEST.

GOOD PEOPLE AND GOOD WATER.

Cherokee County, Ala.

It is impossible to describe by words the enormous quantity of iron ore that is in sight on the land of this company. Said a prominent railroad man of the South: "I could not believe your statement as to the quantity, (200,000,000 tons in sight), but now that I have seen your ore deposits, I wonder how you put so low an estimate on them."

Prof. Robinson, of Bowdoin College, Brunswick, Maine, says: "I found at Bluffton iron ore in abundance, partly in solid cliff masses containing hundreds of thousands of tons, and partly in the form of gravel and small boulders lying in great banks similar in appearance to the gravel banks of New England. Whether there was as much of the gravel as of the bluff ore I could hardly judge, but it was very clear that the quantities of both were simply enormous."

G. S. Patterson, mining engineer, of Anniston, Ala., reports: "The amount of ore in sight was certainly beyond my expectation, though I was prepared to find a large deposit. The Bluff, as it is called, is a solid mass of ore on the side of a mountain, easily approachable, and can be mined cheaper than at any point in Alabama or Georgia, with which I am familiar."

Mr. Wm. H. Edmonds, of the Manufacturers' Record, says: "As to

the quantity of ore here, I don't suppose that all the furnaces in Alabama could use it up in a lifetime."—See Manufacturers' Record May 18, 1889, article entitled "BILL ARP AND BLUFFTON."

Ore can be delivered at furnaces built here at a cost not exceeding 50 cents per ton.

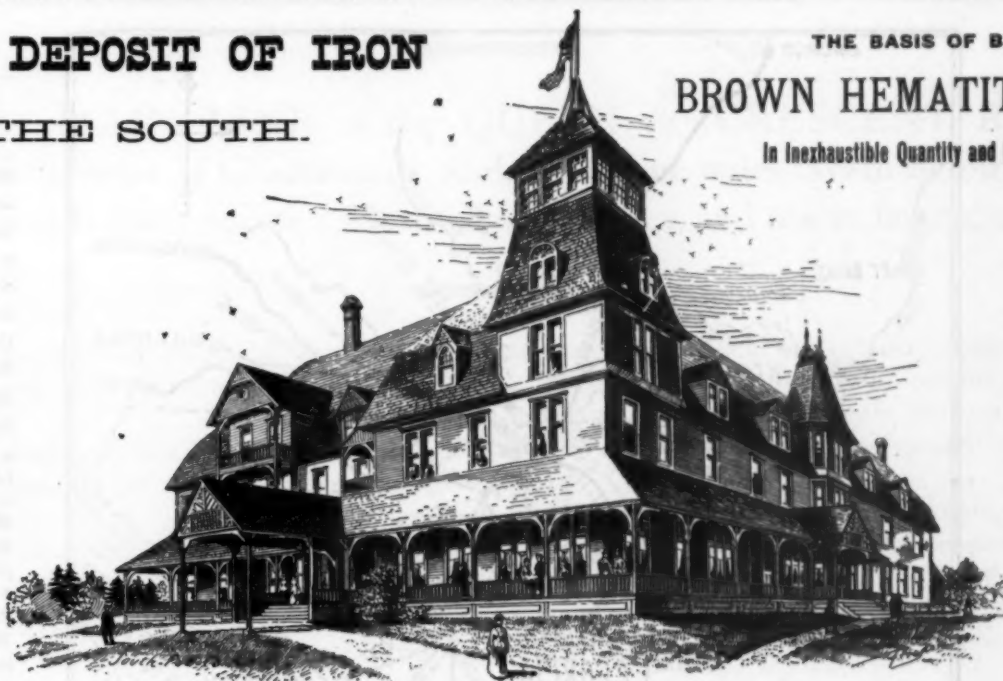
With high grade ores, analyzing over 50 per cent. metallic iron, delivered at the furnace at the above-named price, is there any possibility of such a place as Bluffton not being able to produce iron at figures which will yield a profit despite the dullest of dull times?

Prof. J. H. Pratt, of Birmingham, Ala., reports on samples selected from our property by Mr. Edmonds and Mr. G. S. Patterson as follows:

The sample of brown iron ore, marked "Bluff Ore," contains—	The sample marked "Gravel Ore" contains—
Metallic iron, - - 52.37 per cent.	Metallic iron, - - 53.23 per cent.
Phosphorus, - - - 0.783 "	Phosphorus, - - - 0.931 "
Silica, - - - - 14.60 "	Silica, - - - - 6.35 "
Water combined, - 8.10 "	Water combined, - 10.20 "
Moisture at 100° C - 2.50 "	Moisture at 100° C - 1.68 "

LARGEST DEPOSIT OF IRON IN THE SOUTH.

Ore can be delivered at furnaces built here at a cost not exceeding 50 cents per ton.



THE SIGNAL—NOW OPEN AT BLUFFTON.

THE BASIS OF BLUFFTON: BROWN HEMATITE IRON ORE

In inexhaustible quantity and excellent quality.

Located on the Selma Division of the East Tennessee, Virginia & Georgia Railway, midway between Rome and Anniston, and only two miles and three-fourths from the East & West Railroad, of Alabama.

A Dividend-Paying Stock Below Par. 8,000 Shares of Stock at \$14 Per Share—Par Value \$25.

PRICE OF STOCK:

The directors of the Bluffton Land, Ore & Furnace Co. have decided to offer to investors 8,000 shares (\$112,000) of its treasury stock for the purpose of building a 100 TON DAILY CAPACITY COKE IRON FURNACE at Bluffton, and for such other improvements and purchase of other unimproved real estate as may be considered by the directors for the best interests of the stockholders. This stock is now paying six per cent. from ore shipments, and for the past three weeks we have netted over \$20,000 from the sale of our city property—a sale which is larger by 20 per cent. than our estimate.

Only 8,000 shares will be sold at this price, \$14.00. As soon as this block is sold, which will probably be consummated inside of thirty days, the price will be advanced to \$20.00 per share. The balance left in the Treasury after this sale will probably not be offered less than par, if at all. Judging from present indications, it will not be necessary to sell more than the present block, as receipts from ore shipments and sales of real

estate will be ample to complete the furnace and make all improvements now contemplated.

Such a safe investment has never been offered—a dividend paying stock for less than par. Absolutely safe—cannot be assessed. Fully paid up in the organization. Work will be commenced on the furnace as soon as \$30,000 is subscribed on this sale. Persons desiring to purchase larger blocks than their present means will permit, can make a payment of one-half of the amount desired, the balance to be paid in thirty days. Blanks for subscription will be furnished from this office direct.

Orders will be filled in rotation for 1, 5, 10, 50, 100 or 1,000 shares till the entire block is sold. Positively only 8,000 shares will be sold at the above-named price. Subscriptions can be made direct to this office, or to any of the company's agents here or in New York, Chicago, Boston and Bangor, Maine. Remittances can be made by New York draft, express money order, or by currency by registered letter. We can furnish the highest testimonials in regard to this property from business men and experts who have visited it from all parts of the Union.

SEND FOR PROSPECTUS. ADDRESS

Bluffton Land, Ore & Furnace Company, Bluffton, Ala.

Morristown, Tenn.

The Plateau City of the Great Valley of East Tennessee

is beautifully located on a plateau of Bay's Mountain, about equi-distant from the Cumberland Mountains which bound East Tennessee on the northwest, and the Alleghany Mountains which bound it on the southeast, and is 300 feet above Holston River, which washes the north base of the plateau three miles from the city. Its mean elevation above sea level is about 1,350 feet, while the hills and mountains immediately surrounding it rise to an altitude of 1,935 feet, affording views of surprising extent and grandeur, and at the same time so modifying the temperature that the thermometer rarely registers higher than 90° in summer or lower than 10° in winter. *Its drainage is admirable, and malaria is unknown. It has nearly trebled its population since 1880, having now about 4,000 inhabitants.* It is the commercial and business center of the richest and most extensive agricultural district in the State, where all the cereals and all the grasses

and tobacco are grown to perfection, and where fruits and berries abound. It has hundreds of thousands of acres of uncultured forests accessible to it, abounding in Poplar, Pine, Hemlock, six varieties of Oak, Chestnut, Hickory, Cedar, Maple, Birch, Beech, Sycamore, Gum, Locust, Laurel, Buckeye, Mulberry, Ash, Cherry and Walnut. *The Celebrated East Tennessee Marble* underlies a part of the city, and it is surrounded with rich deposits of Iron Ore, Manganese Ore, Zinc Ore and Lead Ore. It has been said by one who has made a study of the subject, that within a radius of 50 miles around Morristown every variety of iron ore in the United States can be duplicated, and a coke can be made equal to Connellsville coke. We claim without hesitation that Morristown has in its immediate vicinity richer mineral ores, and a greater variety of them, than any city on the Continent.

MORRISTOWN

has Railroad Facilities equal to any city between Lynchburg and Chattanooga, and they will be speedily increased by the completion of the Carolina, Cumberland Gap & Chicago Railway, making the shortest possible railway route between the great cities on the Ohio River, Cincinnati and Louisville, and the seaboard cities, Charleston, Port Royal and Savannah. Besides, the Baltimore & Ohio Railway will probably extend a branch to it from Lexington, Va., and the Tennessee Midland will in all probability be built to Morristown, and a line be built giving direct connection with Atlanta.



MAP SHOWING RELATION OF MORRISTOWN TO THE COUNTRY AT LARGE.

MORRISTOWN

has a citizenship composed almost exclusively of native born Americans. It boasts a splendid system of Graded Schools, Five Commodious Brick Churches, the finest Courthouse in Upper East Tennessee, an Opera House that will seat 600 people, two Solid Well Managed Banks, a flourishing Building and Loan Association, two of the Largest Commercial Flouring Mills in the South, Stove Works, an Agricultural Implement Factory, two Woodworking Factories, a Tobacco Factory, a Carriage and Wagon Factory, and many industries of lesser note.

It is lighted with electricity, and has water works under contract, and is now inaugurating a system of street railways. Its climatic advantages, its unsurpassed record for healthfulness, its abundance of pure water, its central and beautiful location, its transportation facilities, its fruitful agricultural surroundings, its contiguity to rich and exhaustless fields of iron, manganese, zinc and lead ores, marble, coal and timber, mark it as a place destined to be the commercial, manufacturing and railway emporium of Upper East Tennessee, Western North Carolina and Southeastern Kentucky.

To expedite this destiny the city authorities have wisely exempted from taxation for ten years all manufacturing establishments that will give employment to fifteen or more persons, and the county authorities have done the like, so that manufacturing establishments will be exempt from all taxation for ten years, except the merely nominal tax for State purposes. There has been no "boom" or inflation of prices at Morristown, and, as it possesses within itself and contiguous to it almost every element of wealth, it now presents the most inviting field for investment of any city in the South.

Persons who may desire fuller information can obtain it by calling on or addressing

MONTVUE LAND COMPANY

POSTOFFICE BUILDING, — MORRISTOWN, TENNESSEE.

FORT PAYNE, Alabama.

★ COME TO ★

The NEW ENGLAND CITY of the South.

Climate Unsurpassed. Abundance of Pure Water. Drainage Excellent.

No Better Point in the Union
For Safe and Profitable Investment.

Situated on the MAIN LINE of the QUEEN & CRESCENT ROUTE, fifty-one miles Southwest of Chattanooga, and ninety-one miles North of Birmingham.

Elevation is from 895 to 1,600 ft above the sea, and above fever districts.

DeKalb County is entirely free from debt; taxes light.
Most liberal encouragement given to industries of every kind.

Iron Furnace and Rolling Mill will be constructed immediately, and other industries of various kinds are under contract.

Correspondence solicited from those who contemplate coming into the South to establish any kind of manufactories.

The different industries will employ at least two thousand skilled workmen, which will secure a population of over ten

thousand, independent of the many industries contemplated.

Iron of the best quality can be manufactured at as low cost per ton as in any other locality in the South.

Coal and iron are being developed rapidly of a superior quality.

Fine timber abundant and wood-working machinery of every kind can be profitably employed at this point.

The Company is prepared to give every reasonable encouragement to manufacturers who will locate at this point.

✉ Correspondence solicited.

CAPITAL \$5,000,000.

OFFICERS.

President, - - - -	COL. J. W. SPAULDING
First Vice-President, -	HON. D. H. GOODELL
Second Vice-President, -	HON. HENRY B. PEIRCE
Secretary, - - - -	C. L. T. STEDMAN
Treasurer, - - - -	F. H. TOBEY
Manager, - - - -	C. O. GODFREY

BOARD OF DIRECTORS.

HON. D. H. GOODELL, of Goodell Mfg. Co., Antrim, N. H.
HON. HENRY B. PEIRCE, Secretary of State of Mass.
GEN'L SELDEN CONNOR, Ex. Gov. of Maine, Pres.
Northern Banking Co., Portland, Maine.
COL. J. W. SPAULDING, Ft. Payne, formerly of Portland, Me.
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COL. JOHN B. BODDIE, Birmingham, Ala.
W. P. RICE, Pres. Union Investment Company of Kansas
City, resides Fort Payne, Ala.

FORT PAYNE COAL & IRON COMPANY, Fort Payne, Ala.

Anniston

THE CENTER OF
Iron and Cotton Industry
AND MINERAL WEALTH.

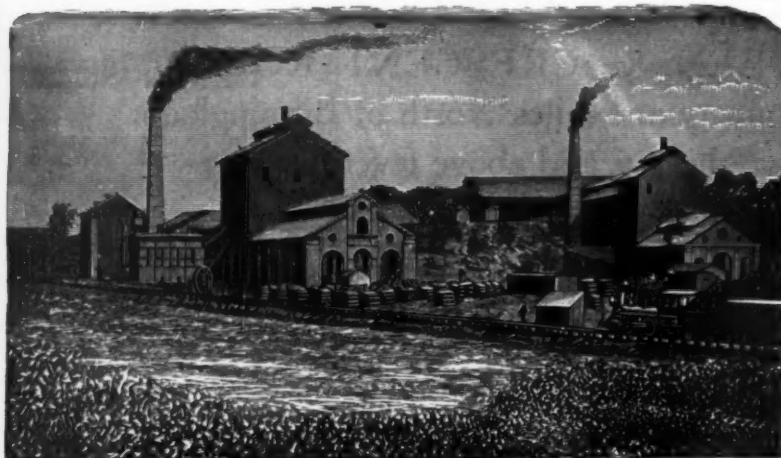
"The Model City of the South."

IT IS

The Profits of Labor only that can add to the wealth and prosperity of a nation or community. It is this only that can make business successful and profitable, sustain and add to the value of real estate.

WHERE

Nature's resources are greatest, where nature's capital in rich agricultural lands, and where iron, coal and other useful minerals are most abundant, most accessible and of superior quality for all purposes, there will capital find its safest investment, largest returns and labor reap its richest reward. It is to the Anniston District where the best professional mining engineers and experts of the United States declare the great center of the iron industry of the South will drift, where its manufacture will be most permanent and profitable, and where ores in the greatest abundance and accessibility exist, and where they will be most easily mined, that this applies.



WOODSTOCK FURNACES—ANNISTON.

The Development of the Past Fifteen Years

Confirms all this, and every year convinces the experts of the correctness of their judgment. It is no longer opinion based on scientific and practical education; it is a fact that is clearly and successfully demonstrated, so that the visitor to the Anniston District can see at every step. The four iron furnaces that have been so long and successfully operated, and the new plant now being erected, and rapidly approaching completion, which will be capable of producing one hundred thousand tons of pig iron a year, demonstrate that

NOWHERE ELSE IN THE SOUTH

Has the iron industry been so profitable and so successful, or been established on so permanent a basis, and of no district is this so universally conceded by all, while nowhere else have arrangements been perfected and already established on so complete a scale to work the crude iron into higher branches of manufacture to increase its value, and to bring into the district the profits of skilled labor. THE GREAT CAR WHEEL WORKS OF NOBLE BROS. & CO., their rolling mill and steam forge and machine shops, and the Alabama Car Works, have been absorbed by the

UNITED STATES ROLLING STOCK COMPANY,

With a capital of \$4,000,000, for the purpose of adding to and enlarging the entire plant to build TWENTY CARS A DAY. Everything that goes into the creation of a car, except the tin for the roof and the wire nails, will be created from Anniston's crude material by her labor and skill. Fifty tons of wheel iron will be made into car wheels daily, twenty tons into car axles, fifty tons of pig iron into car and other castings, and fifty tons into bar iron and bolts, making nearly ten thousand dollars per day added to the wealth of the country by profitable labor converting nature's capital to the use of man. This company have a capital of \$4,000,000, and their Anniston works will represent a cash outlay of \$1,000,000. One thousand skilled mechanics will be employed as soon as the great enlargements under way can be completed.

THE STEEL BLOOMARY

Consumes and increases the value of twenty tons of pig iron per day, while the Pipe Foundry converts to the use of man TWO HUNDRED TONS OF PIG IRON PER DAY in one of the largest and best planned and most convenient labor-saving works on this continent. The Foundry of Murray & Stevenson, Engine and Machine Works of Pinder & Co., and Boiler and Sheet Iron Works of J. & D. Noble, all add to the consumption of crude material by the creation of finished work.

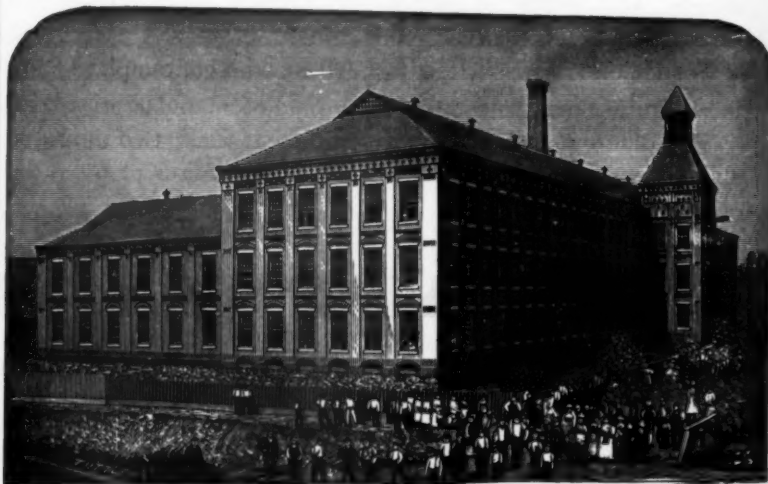
NOR IS IT TO IRON ALONE

That Anniston relies for increase of wealth and population. The Cotton Factory, with eleven thousand seven hundred spindles and three hundred and seventy-five looms, employing over three hundred and fifty operatives, adds greater value to the products of agriculture by converting six thousand bales of cotton into cotton cloth. The immense ninety-inch Morse Cotton Compress, with its brick warehouses, is fast making Anniston a cotton market and commercial center, and aiding its wholesale and retail merchants to extend and hold the trade of the country tributary to Anniston that its system of railroads has opened to them. The Georgia Pacific, the East Tennessee, Virginia & Georgia Railroad systems,

Give Direct Communication and Through Rates

To all parts of the country, while the Anniston & Atlantic Railroad, built by Anniston capital to open up new agricultural and mineral resources, gives Anniston, by connection with the Central of Georgia system, communication with the Atlantic sea coast and the new Anniston & Cincinnati Railroad, built and owned by Anniston citizens, opens up new resources and connections, and a shorter line with the great Northwest.

The proposed extension of the Anniston & Atlantic Railroad to Blocton will give another and shorter line to the great Cahaba Mines, producing the very best coal for domestic and manufacturing purposes in the South. Forty thousand acres of these coal lands, upon which a million and a half dollars have been lately spent in opening new mines and building several hundred coke ovens, ALL OWNED AND CONTROLLED BY ANNISTON CAPITAL, and developed to mine and manufacture three thousand tons of coal and coke per day, secures to Anniston for generations to come a full and certain supply of cheap fuel for all her industries, operated where a rich agricultural country can feed a manufacturing and commercial people, and where the



ALABAMA MANUFACTURING COMPANY'S COTTON MILL—ANNISTON.

Best, Healthiest and Most Invigorating Climate in the World,

With mountain air and pure water, and an elevation of nine hundred feet above tide water, insures the health and comfort of the workman and his family; where health and comfort stimulate and lighten labor, and secure to it and its industries the reward due to both. It is these advantages which have been given by nature that enabled Anniston's citizens to create her past and present prosperity, and which secure her future. It is that they may participate in and avail themselves of these advantages that Anniston invites NEW CAPITAL AND TALENT AND ENERGY from all sections. We invite all to come and see, and on the spot to judge for themselves of Anniston's great resources and possibilities. The comfort and quiet of the famous Anniston Inn will make a visit to our city a treat and pleasure. Any information, attention and courtesy will be given and shown by addressing or applying to the

ANNISTON CITY LAND CO., Anniston, Ala.

CONSTRUCTION DEPARTMENT

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

*Means machinery is wanted, particulars of which will be found in "Machinery Wanted" columns.

†In correspondence relating to matters reported in this paper, it will be a favor if it is stated that the information was gained from the MANUFACTURERS' RECORD.

Stove Works.—T. L. Haney & Co., of West Bridgewater, Pa., contemplate moving their works to some point in the South.

ALABAMA.

Alexandria—Saw Mill.—J. N. Martin will add a double surfer and matcher and a resawing machine to his saw mill.*

Anniston—Machine Works.—The Challenge Shingle Machine Co. will be organized with J. W. Mewborn, president, and E. Anderson, vice-president, to manufacture shingle machines. The capital stock is \$50,000.

Anniston—Car Works.—The Alabama Car & Foundry Co., previously reported as to build car works, have selected a site in South Anniston and will probably soon organize and commence work.

Attalla—Cotton Factory.—A cotton factory is projected.

Birmingham—The Woodlawn Cemetery Co. will issue bonds to the amount of \$15,000 to improve their cemetery.

Birmingham—Sash and Door Factory.—W. P. Brewer has enlarged his sash, door and blind factory and contemplates a further enlargement.

Birmingham—Broom Factory.—The Birmingham Broom Factory has been increased in capacity.

Birmingham—Land.—Negotiations are being made for the consolidation of the several land companies. John B. Boddie can give particulars.

Calera—Barrel Factory.—The Alabama Lime Co. will put in machinery for the manufacture of lime barrels.

Calera—Saw Mill.—A saw mill is being started by Large & O'Neal.

Cottondale—Cotton Mill.—Tuskaloosa Manufacturing Co. contemplate adding 500 spindles and 60 looms to their cotton mill during this year. 10,000 spindles and 240 looms is present capacity.

Decatur—Water Works.—The Decatur Water Works will probably be extended.

Decatur—Publishing.—Mr. Boyles will publish the Daily Siftings.

Ensley—Pipe Works.—A company has been organized to build pipe works to employ 200 men, and will, it is said, soon start works. The Tennessee Coal, Iron & Railroad Co. can give particulars.

Florence—Electric-light Plant.—The Florence Electric Light & Power Co., previously reported as to enlarge their plant, have contracted with the Southern District Telephone, Telegraph & Electric Co. for additional machinery and buildings to cost \$26,000. A two-story brick and stone building, 60x100 feet, will be erected, and a new 85 horse-power engine and 120 horse-power boiler put in.

Florence—Machine Works.—A \$50,000 company has been organized, it is reported,

to manufacture machinists' tools and machinery.

Fort Payne—Railroad.—It is proposed to build a railroad from Fort Payne to the Richmond & Danville Railroad at Gainesville, and a bill has been introduced in the legislature at Atlanta to charter the Fort Payne & Eastern Railroad Co. to build the part that will be in Georgia.

Fort Payne—Electric-light Plant.—The Fort Payne Electric-light, Power & Heating Co., has been organized with J. W. Spaulding, president, and A. E. Chapman, secretary. The company will erect a plant with a capacity of about 50 arc and 1,000 incandescent lights.

Gadsden—Terra-cotta Works.—The Coosa Sewer Pipe Manufacturing Co. is the name of the company lately reported as to build terra-cotta works.

Gadsden—Basket Factory.—W. H. Hunt, of Chattanooga, Tenn., is organizing a stock company to establish a basket factory.

Gate City—Bridge.—J. W. Worthington & Co., contractors for the Red Mountain branch of Birmingham Mineral Railroad Co., will erect an iron bridge. Work has probably commenced.

Greenville—Railroad.—The Southeastern Railroad Co., reported last week as chartered to build railroad to Elba, are making surveys and securing the right of way. It is probable, as previously stated, that the Louisville & Nashville Railroad Co. will construct the road.

Greenville—Cedar Factory.—Joseph Steiner & Sons will start a factory for the manufacture of pencil cedar.*

Jemison—Cotton Factory.—A movement is on foot to organize a \$100,000 stock company to establish a cotton factory.

Mobile—Gas and Electric-light Plants.—The Alabama Gas, Electric-light & Power Co. have applied for a franchise to erect gas works and an electric-light plant. Their capital stock is \$100,000. Gaylord B. Clark is interested.

New Market—Mill and Gin.—A. D. & W. E. Rogers are improving their mill and cotton gin and putting in some new machinery.

New Market—Spoke and Hub Factory.—A spoke and hub factory is to be built soon.

Sheffield—The East Sheffield Land Co. will meet July 25 to authorize a subscription to the stock of a new company to be formed.

Talladega—Pottery Works.—E. O. Stuart has purchased pottery works and will put in new machinery and operate them.

Talladega—Tannery.—The capital stock of the Talladega Tanning Co., reported last week as chartered, is \$25,000.

Troy—Cotton Factory.—It is reported that a cotton factory will be built during the year.

Troy—Knitting Factory.—F. Henderson, O. C. Wiley, J. D. Murphree and others have organized the Henderson Knitting Co. for the manufacture of knit goods. They will soon put in machinery. Capital stock is \$15,000.

Troy—Water Works.—A franchise to build the water works referred to last week has been granted.

Troy—Laundry.—A \$2,500 stock company will be organized to rebuild the Troy Steam Laundry, lately burned, on a larger scale.

Tuskaloosa—Sewerage System.—The city have let the contract for building the sewerage system previously reported to J. B. Neely and G. L. Gillespie, of Chattanooga, Tenn.

Tuskegee—The Notasulga Land, Improvement & Manufacturing Co. has been incorporated.

ARKANSAS.

Bentonville—Planing Mill, &c.—T. T. Chamberlain will start the planing mill and furniture factory lately reported.

Camden—Electric-light Plant.—E. W. Maxwell, of Texarkana, is considering the erection of an electric-light plant.

Camden—Water Works.—The Camden Water Co. will probably lay 2½ miles of additional mains.

Fort Smith—Machine Shops and Roundhouse.—The St. Louis & San Francisco Railroad Co. (office, St. Louis, Mo.) have had plans prepared for their new machine shops and roundhouse.

Hope—Iron Foundry.—Cornish & Son will remove their iron foundry from Nashville to Hope, reported last week. A stock company has been formed.*

Little Rock—Water Works.—The Little Rock Water Works have been purchased by the American Water Works & Guarantee Co., of Pittsburgh, Pa., who will put in new filtering apparatus and make other improvements.

Little Rock—Tannery.—The United States Tanning & Manufacturing Co. have been incorporated with Charles Schaffler, president, and J. W. Frey, secretary, to operate a tannery. The capital stock is \$780,000.

Little Rock—Planing Mill.—Richardson & Rutherford, reported last week as putting new boiler in planing mill, have added some other new machinery and made improvements doubling their capacity.

Little Rock—Gas Works.—The Pulaski Gas Co. will erect a new gasometer.

Pine Bluff—Flour Mill and Elevator.—The Pine Bluff Mill & Elevator Co. has been incorporated by E. L. Taylor, J. B. Speers, P. P. Byrd and others to build a flour mill and grain elevator. The capital stock is \$50,000.

Wynne—Stave Factory.—The stave factory of the Oxley Stave Co. will be moved from McCrory to Wynne.

Wrightsville—Brick-yard.—William Farrell & Co. will probably start a brick-yard.

FLORIDA.

Apopka—Machine Works.—L. H. Donkel, of Winter Park, has organized a \$50,000 stock company, it is reported, to manufacture his patent road engine.

Brooksville—Cigar Factory.—A cigar factory will probably be established.

De Land—Railroad.—The St. Johns & De Land Railroad Co. has been organized with J. B. Stetson, of Philadelphia, Pa., as president; George Cecil, vice-president, and Charles A. Miller, secretary.

De Land—Water Works.—The estimated cost of the water works previously mentioned is \$40,000. The mayor can give particulars.

De Funiak Springs—Mrs. S. E. Cummings will publish the Times.

Dunnellon—Phosphate Land.—Mr. Dunn, of Ocala, has purchased 40 acres of phosphate land from Capt. Renfro, it is reported, and will probably develop.

Fernandina—Ice Factory.—Efforts are being made to have an ice factory started.

Gainesville—Publishing.—I. G. Hoffman and H. H. McCreary have commenced publishing the Sun.

Kissimmee—Sugar Mill.—The sugar mill lately reported as being erected by R. E. Rose is to have a capacity daily of 3 tons sugar.

Kissimmee—Irrigation.—The Lake Apopka Sugar Co. are erecting a plant for irrigating their lands.

Lake City—Cotton Factory, &c.—The Florida Manufacturing Co., lately mentioned as chartered, is a consolidation of the Lake City Cotton Ginning Co. and the Madison Cotton Ginning Co. They are putting in the machinery for manufacturing netting, etc., reported last week.

Lake City—Saw Mill and Railroad.—John W. Dowling & Co. will remove their saw mill from Lake Ogden to a point on the Georgia Southern & Florida Railroad about 7 miles from Lake City. They have bought timber on 20,000 acres of land. They are building the road from Lake City to their mill, mentioned in last issue.

Lakeland—Saw and Planing Mill, &c.—The C. S. Philips Tobacco Co., reported last week as to cultivate tobacco &c., will erect a large plant for heating and curing their tobacco, and a saw and planing mill.*

Madison—Knitting Factory.—The Florida Manufacturing Co., lately reported as chartered with \$150,000 capital stock, are erecting a knitting factory, machinery for which has been purchased. This is the same as the factory reported last week.

Palatka—Railroad.—The Palatka & Lake Shore Railroad Co., lately reported as chartered, will soon commence the surveying of their road.

Sanford—Cigar Factory.—L. B. Conde will probably move his cigar factory from Key West to Sanford.

St. Augustine—Cigar Factory.—The Havana & St. Augustine Cigar Manufacturing Co. has been organized by F. B. Genover, Dr. M. R. Morena and others to manufacture cigars. They will start factory at once.

Tallahassee—Railroad.—The Tallahassee & Carrabelle Railroad Co. are about to begin work on their road previously reported.

Tampa—Factory.—It is reported that a new enterprise will be established at a cost of \$100,000.

Punta Gorda—Canning Factory.—J. W. Bushnell contemplates establishing a canning factory on his pineapple farm on the Caloosahatchee river.

GEORGIA.

Abbeville—Brick-yard.—Mr. Cobb, of Americus, will establish a brick-yard.

Athens—Paint Mill.—Parr Bros. have erected a French burr paint mill with a daily capacity of 360 gallons of paint.

Athens—Foundry, &c.—T. Bailey writes that he will not build a new foundry and machine shop as stated last week.

Atlanta—Oil Refinery.—The Gate City Oil Co., lately reported as building a cotton-seed oil mill, are building also a refinery with a daily capacity of 400 barrels. Daily capacity oil mill is 125 tons. Machinery is ordered.

Atlanta—Flour Mills.—The P. H. Postell Mill Co. have enlarged their flour mill and built a new mill.

Atlanta—Water Works.—The water commissioners, previously reported as investigating in regard to increasing the water supply of the city, will probably decide to obtain supply from the Chattahoochee river.

Atlanta—Electric Plant.—A bill will be introduced in the legislature to incorporate the Atlanta & Chattahoochee Pneumatic & Electric Power & Lighting Co.

Atlanta.—Bills have been introduced in the legislature to incorporate the Melon Belt Railroad Co. to build a road from Quitman to some point on the Georgia Southern & Florida Railroad, with E. A. Jelks, Capt. J. G. McCall and others as incorporators; the Augusta Western Railroad Co.; the Atlanta & Lithonia Railroad; the South Bound

Railroad Co.; the Bainbridge, Cuthbert & Western Railroad; the Collins Park & Belt Railroad Co., of Atlanta; the Rome Street Railroad Co.; the Planters' Loan & Banking Co.; the Waycross Street Railway Co.; the Winton & Columbus Street Railroad Co.; the Farmers' Alliance Manufacturing & Merchandise Co., of Jackson county; the Okefenokee Land & Drainage Co.; the Waycross Air Line Railroad Co.; the Hopkinsville & Florida Southern Railroad Co.; the Richmond County Belt Line Railroad Co., and the Fort Payne & Eastern Railroad Co.

Atlanta—Phonographs.—The Georgia Phonograph Co. has been incorporated by H. F. Dexter, C. B. Rogers, J. F. Martin and others, of New York. The capital stock is \$225,000.

Atlanta—Machine Shop.—Houchin & Moor have started a machine shop.

Augusta—Ice Factory.—The Polar Ice Co. will increase the capacity of their ice factory from 18 to 45 tons daily, and have let contract for machinery.

Augusta—Brewery.—The Augusta Brewing Co. are enlarging their brewery.

Augusta—Cotton Factory.—The Augusta Cotton Factory contemplate changing their style of goods.

Augusta—Cotton Mill.—The John P. King Manufacturing Co. contemplate adding about 6,000 spindles and 100 looms to fill mill. Capacity now is 35,104 spindles and 1,056 looms.

Augusta—Cotton Mill.—The Dartmouth Spinning Co. will probably put in 800 additional spindles soon. They now have 9,208.

Barnesville—Evaporating Factory.—The Barnesville Fruit Evaporating Co., capital stock \$1,400, has been organized with H. R. Chambers as president to start a fruit evaporating factory. Machinery is probably purchased.

Canton—Bridge.—The Columbus Bridge Co., of Columbus, O., have been awarded contract to build the three-span Pratt truss iron bridge, 270 feet long, across the Etowah river at \$4,400, previously reported.

Cobb—Shingle Mill.—John Walker and J. R. Cain have started a shingle mill near Cobb. Capacity is 20 M daily.

Columbus—Knitting Mill.—J. A. Walker will organize a stock company to operate his Columbus Knitting Mill. Has just added 17 machines, making total 32.

Cordele—Cheese Factory.—The Cordele Dairy & Poultry Co. has been organized and will operate a stock farm, start a cheese factory, &c. Capital stock is \$20,000.

Dahlonega—Gold Mine.—C. M. Dobson and D. W. A. Baker have purchased the Victoria gold mine, and will put in new machinery and develop it.

Flowery Branch—Carriage Factory.—Bagwell & Gower are putting additional machinery in their carriage works.

Forsyth.—The Georgia Investment Co. have been incorporated by W. D. Stone, J. H. Huddleston, O. H. B. Bloodworth and others to deal in real estate, &c. The capital stock is \$5,000.

Forsyth—Ginnery, &c.—The Co-operative Manufacturing Co., lately mentioned as incorporated to build a cotton-seed oil mill and fertilizer factory, have purchased a site for their buildings. They will operate a cotton ginnery also.

Gainesville—Railroad.—Thomas Parkes and associates are thinking of building a railroad from Gainesville to some point on the Western & Atlantic Railroad.

Griffin—Cotton Factory.—The Kincaid Manufacturing Co. intend adding 2,500 spindles to their cotton mill later in the year or the early part of next year.

Hawkinsville—Grist Mill and Gin.—The Hawkinsville Ginning & Milling Co. has been organized and will erect the grist mill and cotton gin lately mentioned as to be built by Messrs. Parker.

Jasper—Cotton Mill.—W. C. & Thomas Atherton will soon add a twister and a spooler to their Harmony Mills.

La Grange—Cotton Mill.—The La Grange Mills contemplate adding machinery for manufacturing cotton rope.*

La Grange—Cotton Mill.—The Troup Factory will add 2 cards, 8 deliveries of drawings, 30 spindles to roving machinery, &c., at a cost of \$1,750.

Macon—Street Railway.—George F. Work, of Philadelphia, Pa., has purchased the Macon Street Railway for \$75,000, and will, it is stated, operate it by electricity.

Macon—Electric-light Plant.—Mr. Nussbaum is increasing the capacity of his electric-light plant.

Macon—Asphalt Works.—The T. J. Garling & Co. Granite Co. contemplate adding a plant for manufacturing asphalt paving blocks.*

Macon—Oil Mill and Fertilizer Factory.—The Farmers' Alliance will probably organize a stock company to build a cotton-seed oil mill and fertilizer factory.

Madison—Oil Mill and Fertilizer Factory.—The name of the company previously reported as being organized by the Farmers' Alliance to build a cotton-seed oil mill and fertilizer factory is the Georgia Farmers' Oil & Fertilizer Co. The capital paid in is \$30,000. Work will be commenced at once.

Madison—Electric-light Plant.—The Gate City Oil Co. will light their ginnery, lately reported, by electricity, and have submitted a proposition to the city council to light the city.

Marietta—Bridge.—J. M. Stone will receive proposals until August 10 for building a one-span bridge 68 feet long of red heart pine across Soap's creek.

Newnan—Cotton Mill.—The Newnan Cotton Mills are thinking of adding 100 looms. Their mill has 5,000 spindles, and has been in operation since May 1.

Newnan—Electric-light Plant.—The Newnan Cotton Mills will put in an electric plant. Address R. D. Cole, Sr.*

Rome—Broom and Trunk Factory.—John Printup will start a broom and trunk factory at Printup City near Rome.*

Rome—Factories, &c.—J. W. Rounsaville, J. H. Reynolds, J. D. Williamson and others have incorporated the North Georgia Manufacturing Co. to build and operate factories, furnaces, mills, water works, etc. The capital stock is \$1,000,000.

Savannah.—The Mercantile & Real Estate Co-operative Association have been incorporated by E. K. Love, A. M. Monroe and others to conduct a mercantile and real estate business. The capital stock is \$10,000.

Thomasville—Railroad.—The name of the \$100,000 stock company lately reported as being organized to build a railroad to Cordele is the Thomasville & Cordele Railroad Co. A. P. Wright is interested.

Villa Rica—Lumber Mill.—The Villa Rica Lumber Co. contemplate putting additional machinery in their mill.

Wenona.—The Foote & Zuber Lumber Co., of Atlanta, have purchased the plant of Dooley Lumber Co., and will repair and improve it, it is stated, at a cost of \$15,000. The purchase includes 8,000 acres of timber lands.

KENTUCKY.

Brandenburg—Natural Gas, &c.—The Keystone Natural Gas Co. has been organized by C. Miles, G. W. Richardson, Chas. Zimmerman and others to develop gas and oil lands. The capital stock authorized is \$1,000,000.

Brandenburg—Natural Gas, &c.—The Coleman Gas Co. have been incorporated by W. L. Coleman, G. W. Smith, H. T. Kendall and others to develop gas and oil

lands. The authorized capital stock is \$1,000,000.

Buffalo—Flour Mill.—Brown & Sallee will put roller machinery in their flour mill.*

Cloverport—Glass Works.—The W. C. Depauw Glass Co., of New Albany, Ind., will, it is reported, establish glass works if natural gas is developed in sufficient quantity.

Cynthiana—Electric-light Plant.—The Cynthiana Electric-light & Power Co. have received contract to light the city, and will erect a plant at once.

Glasgow—Saw Mill.—Vaughan Bros., reported last week as to put additional machinery in their flour mill, contemplate erecting a saw mill to be run by water power with 6-foot head.*

Henderson—Cotton Mill.—The Henderson Cotton Mills will during September add 2,400 spindles and 64 looms. Their mill now has 21,600 spindles and 544 looms.

Hogdenville.—Major Thomas H. Hays, of Louisville, and others will probably extend the Elizabethtown & Hogdenville Railroad to Gallatin, Tenn., 95 miles, via Glasgow and Scottsville. Surveys will soon be made.

Hopkinsville—Railroad.—The Kentucky & Tennessee Railroad Co. have contracted with a construction company for the building of a railroad from Hopkinsville to a point on the Chesapeake & Ohio Railroad, 25 miles from Hopkinsville, conditioned upon the subscription of \$100,000 by the city. Work will commence within 60 days if subscription is voted.

Lexington.—The Cumberland Valley Land Co. have increased their capital stock from \$100,000 to \$150,000.

Louisville—Stove Foundry.—The O. K. Stove Co. will build a 10-ton stove foundry at once.*

Louisville—Mining.—C. D. Moody, George S. Moore, A. H. Patterson and others have incorporated the Kentucky Mining Co., capital stock \$250,000, to mine zinc, lead, &c.

Madisonville—Railroad.—A bill will be introduced in the next session of legislature asking for a charter for a railroad from Madisonville to Owensboro. Surveys are being made.

Mayfield—Foundry and Machine Shop.—A foundry and machine shop will be started by E. S. Beaumont.*

New Castle—Railroad.—A construction company is being organized to build a railroad to Shelbyville.

Nicholasville—Compress Factory.—F. F. Caltin, J. M. Hadley and others have formed a company and started the manufacture of a hemp, cotton, straw and hay compress. The factory will probably soon be enlarged.

Owensboro—Flour Mill.—The flour mill of W. J. Lumpkin is being remodeled.

Owensboro—Pipe Line.—The Owensboro Mineral & Gas Line Co. have been organized to build the pipe line to Cloverport, lately mentioned, by S. M. Deane, R. S. Hughes, P. C. Brashear and others. The capital stock is to be \$500,000.

Paducah—Railroad.—The Paducah & Tennessee Railroad Co., of Kentucky, and the Paducah & Tennessee Railroad Co., of Tennessee, have consolidated. They are about to begin work on their road. A \$50,000 subscription has just been voted by Paducah.

Paris—Electric-light Plant and Electric Railway.—S. Salamon, representing a syndicate, has applied for a franchise to erect an electric-light plant and build an electric railway about 1½ miles long.

Pineville—Coke Ovens.—The Pineville Coal & Iron Co. are reported as building 100 more coke ovens.

Richmond—Planing Mill.—Myers & Carse will enlarge their planing mill.

Shelbyville—Flour Mill.—Julius G. Guthrie is overhauling his flour mill, which has been idle for some time, and will put it in operation.

Winchester—Fire-brick Works.—George Carlyle will probably establish fire-brick works. He is making investigations.

LOUISIANA.

Algiers—Marine Ways.—Mr. Lawton is building a set of marine ways at Tunisbury.

Arcadia—Railroad.—The Arcadia, Alexandria & Fort Smith Railroad Co., lately reported, have surveyed 50 miles of their road and will let contract shortly for the construction of 15 miles. L. M. Polk is chief engineer.

China—Saw Mill.—H. H. Hornell contemplates building a saw mill.*

New Orleans—Sugar Refinery, &c.—The Louisiana Sugar Refining Co. are putting in new machinery and will build a pipe line for syrup to the Planters' Sugar Refinery. They will also build a bridge to connect their refinery and warehouse, as stated last week.

New Orleans—Iron Foundry.—The Leeds Co., Limited, has been organized and will operate the foundry of Leeds & Co.

New Orleans—Cotton Mill.—The Maginnis Cotton Mills will add 250 looms to mill, which now has 36,000 spindles and 1,000 looms.

New Orleans—Car Factory.—The Electric Traction & Manufacturing Co., lately mentioned as organized, have purchased a site and will erect a factory for the manufacture of electric cars.

New Orleans—Mattress and Bed Factory.—The Louisiana Mattress, Iron & Spring Bed Co., capital stock \$6,000, has been organized to manufacture mattresses, spring beds, &c. Joseph Bayle is president, and William H. Wilson, secretary.

MARYLAND.

Baltimore—Grease Factory.—The Smith's Railroad Axle Grease Co. have been incorporated by Nathan Gutman, Joseph A. Thomas, A. W. Jennings and others for the manufacture and sale of lubricators. The capital stock is \$10,000.

Baltimore—Chair Factory.—George Chipman & Sons will establish a factory for the manufacture of cane chair seats and backs in the House of Correction.

Baltimore—Iron Works.—Bartlett, Hayward & Co. will build a three-story addition to their iron works.

Baltimore—Bridge.—A. E. Smyrk, city commissioner, will receive proposals until August 5 for furnishing and erecting the superstructure for the Cedar avenue iron bridge, previously reported. The appropriation is \$60,000.

Berlin—Flour Mill.—Jordan, Crampton & Co. are arranging to put steam power in their flour mill.

Gardensville—Bridge.—J. S. Biddison will receive proposals until July 22 for building a wooden or iron bridge, masonry and abutments, over Herring run. Particulars can be had from H. Lange & Sons, Baltimore.

Hagerstown—Mills.—J. W. Stonebraker has purchased the mill of A. W. Martin for \$5,000.

Havre-de-Grace—Shoe Factory.—J. Faust & Sons, of Baltimore, contemplate enlarging their shoe factory and are negotiating to remove it to Havre-de-Grace and erect plant to cost \$125,000.

Havre-de-Grace—Stone Quarry.—McClenahan & Bro. have increased the capacity of their stone quarry.

Lutherville—Nursery.—The Lutherville Nursery & Florist Co. has been incorporated by W. H. Baldwin, Jr., A. L. Black, E. J. Codd and others. Three greenhouses will be built, two to be 18x200 feet, and one

18x150 feet. The houses will be heated by steam. Capital stock is \$50,000.

Medford—Fertilizer Works.—The Medford Fertilizer Co., lately organized with Job Hibberd as president, are erecting works.

Port Republic—Mill.—John Locke will rebuild his mill lately mentioned as wrecked by a flood.

Unionville—Creamery.—A creamery has been started by E. D. Danner.

Washington, D. C.—Street Railroads.—The Metropolitan Railway Co. and the Belt Line Street Railway Co. are investigating with a view to operating their lines by either cable or electric power.

Watervale—Saw Mill.—A new saw mill has been built by William H. Waters.

Watervale—Fertilizer Factory.—W. H. Waters contemplates starting a fertilizer factory.

Weverton—Flour Mill.—U. Darby will put steam power in his flour mill.

MISSISSIPPI.

Aberdeen—Spoke Factory.—A spoke factory is being started. George Tolmie is interested.

Greenwood—Oil Mill.—The Planters' Oil Mill & Manufacturing Co. have let contract for the erection of their oil mill, previously reported, to Callahan & Co., of Dayton, O., at \$60,000. The capacity is to be 60 tons.

Jackson—Saw Mill, &c.—Enock Bros. will erect a saw mill and wood-working factory.

Jackson—Saw Mill.—Z. W. Johnson has recently erected a saw mill near Jackson.

Magee—Saw Mill.—E. Burham has erected a saw mill.

Meridian—Cotton Factory.—Eastern parties have made a proposition to build a cotton factory to cost \$125,000 or \$150,000. If anything is done the Board of Trade can give information.

Mississippi—Saw Mill.—Thomas Avent has erected a saw mill on the Tallahatchie river.

West Point—Cotton Factory.—The cotton factory lately reported, if built, will have a capacity of 5,000 to 6,000 spindles. Cost will be \$125,000 to \$150,000. Particulars can be had from W. G. White.

Torrance—Bridge.—J. L. Eskridge, of Coffeeville, will receive proposals until August 5 for building a bridge across Schooner river.

NORTH CAROLINA.

Bryson City—Electrical Railroad.—It is proposed to build the electrical railroad mentioned last week from Bryson City to Franklin. B. B. Lake can give information.

Bryson City—Saw and Planing Mill, &c.—Arthur Coffin & Co. are building a saw and planing mill and factory for manufacturing insulator pins. Machinery is purchased. Power is 100-horse.

Bryson City—Sash and Blind Factory.—McDonald & Fenson, of Alpena, Mich., will build a sash, door and blind factory and have purchased machinery.

Bryson City—Furniture Factory.—A furniture factory has been started by Brown & Clarke.

Bryson City—Stave Mill.—Hill Bros. & Co. contemplate starting a stave mill.*

Bryson City—Veneering Mill.—Ohio parties contemplate building a mill for manufacturing veneer. Lake & Hodge can give information if anything is done.

Bryson City—Saw Mill.—The Tuckasee Lumber Co. are building a 50 horse-power saw mill on Clarke creek and will ship from Bryson City.

Burlington—Machine Shop.—Lafayette Holt has started a machine shop.

Burlington—Cotton Mills.—The Carolina Cotton Mills are preparing to build a new dam and make other improvements.

Bynum's—Cotton Factory.—The J. M. Odell Manufacturing Co. expect to soon increase the capacity of their cotton factory, but have not decided as to what extent.

Chadbourn—Cotton Mill.—The Ornith Cotton Mills will add 20 looms at once. Capacity will then be 30 looms.

Charlotte—Oil Refinery.—The Charlotte Oil & Fertilizer Co., reported lately as building a cotton-seed oil mill and fertilizer factory, are building also a refinery with a daily capacity of 400 barrels. Machinery is purchased.

Cleveland Mills—Cotton Mills.—The Cleveland Cotton Mills will add at once 2,112 spindles. They now have 2,996.

Coleridge—Cotton Mill.—The Enterprise Manufacturing Co. will build a new picker-house and make other additions to their cotton mill.

Concord—Cotton Mill.—The capacity of the additional cotton mill mentioned previously as to be built by the Odell Manufacturing Co. will be 15,000 spindles and 500 looms.

Egypt—Coke Ovens and Railroad.—It is reported that the Egypt Coal Co. will build a number of coke ovens. They will build about 1 mile of railroad.

Fayetteville—Cotton Mill.—The Fayetteville Cotton Mill, lately mentioned as putting in steam power, may add other machinery.

Harden—Cotton Factory.—O. D. Carpenter and others are making efforts to organize a \$45,000 stock company to build the cotton factory reported in last issue. Capacity contemplated is 2,500 spindles. Will use water power.*

Hendersonville—Street Railway.—The building of a street railroad to Flat Rock is talked of.

King's Mountain—Cotton Factory.—The King's Mountain Manufacturing Co., reported in May last as to put in additional machinery, will add 1,000 spindles during this year. Factory now has 2,080 spindles.

Leaksville—Woolen Mill.—The Leaksville Woolen Mills have put in some additional spindles.

Liberty—Cotton Factory.—The Mount Pleasant Manufacturing Co. will add 200 spindles to their cotton factory, now having 1,728 spindles and 100 looms.

Lincolnton—Cotton Factory.—D. E. Rhyne & Co. are adding 1,000 twist spindles to their factory, which will give them 3,300 spindles.

Manchester—Lumber Mill.—A Northern party has purchased the plant of the Williams Lumber Co. and will enlarge and improve same.

Montgomery County—Gold Mine.—A Northern party is considering the purchase of the Little Lead or Zebedee Russell mining property, containing 300 acres, with a view to developing and erecting a plant of machinery.

Mount Holly—Cotton Mill.—The Tuckasee Manufacturing Co. expect to add soon about 1,000 twister spindles to their cotton mill. They added 2,000 spindles in March last.

Mount Olive—Saw and Planing Mill, &c.—W. P. Hall, B. A. Griswold and J. D. Aaron have organized the Pioneer Lumber Co. They will erect a saw and planing mill and two dry-kilns. Machinery is reported as purchased.

Murfreesboro—Saw Mill.—E. C. Worrell has put additional machinery in his saw mill.

Murphy—Saw Mills.—Hon. U. A. Woodbury, of Burlington, Vt., and Charles Stimets, of New York, N.Y., have purchased timber lands and will erect large saw mills.

Red Banks—Oil Mill.—S. R. Townsend will build a 10-ton cotton-seed oil mill if he can secure machinery in time for the next crop.*

Rocky Mount—Cotton Mill.—The Rocky Mount Mills will increase their capacity.

Salisbury—Cotton Mill.—The Salisbury Cotton Mills, previously mentioned as to probably add spinning machinery, are thinking of adding 6,000 spindles in the fall.

Spout Spring—Saw Mill.—McDiarmid Bros. will probably purchase another saw mill with double the capacity of their present mill.

Springhope—Oil Mill.—A stock company will probably be organized to erect a cotton-seed oil mill.

Vilas—Saw Mill.—J. P. Council contemplates adding a saw mill to his works.

Vilas—Lead and Silver Mine.—J. P. Council contemplates opening a lead and silver mine.

Weldon.—The Roanoke Water Power & Navigation Co. are negotiating to develop their water power at once if a subscription of \$10,000 is made to their stock.

Wilmington—Planing Mill, &c.—Parsley & Wiggins will rebuild their planing mill and sash and blind factory reported in this issue as burned. Loss was \$25,000.*

Wilson—Carriage Factory.—Hackney Bros. have added machinery to their carriage factory.

SOUTH CAROLINA.

Charleston—Wharf, &c.—P. Broderick has enlarged his wharves and built a tram-road for carrying coal.

Charleston—Box Factory.—The Imperial Envelope & Box Manufacturing Co. has been organized with Jonathan Lucas, president, and F. S. Rodgers, treasurer, for the manufacture of paper boxes, tags, envelopes, etc. The capital stock is \$10,000.

Charleston—Phosphate Mill.—Mead & Co. have built a new phosphate mill 9 miles from Charleston.

Clifton—Cotton Mill.—The Clifton Manufacturing Co., previously mentioned as to enlarge their No. 2 mill, will add next fall 5,374 spindles and 180 looms. Mill now has 21,504 spindles and 720 looms.

Cokesbury—Handle Factory.—Mr. Johnston, of Indianapolis, Ind., representing a handle manufacturer, is investigating the advantages of Cokesbury as a site for a handle factory.

Columbia—Cotton Mill.—The Congaree Manufacturing Co. will in the fall add to their cotton mill from 4,000 to 6,000 spindles. Their mill has 8,000 spindles now.

Darlington—Electric-light Plant.—It is contemplated to erect a plant to light the city. J. C. Willcox, mayor, can give information.*

Edgefield C. H.—Mill and Gin.—A company is being organized to build a grist mill, cotton gin, etc.

Florence—Ice Factory.—An ice factory is to be built soon.

Florence—Tobacco Factory.—Rev. B. G. Covington is endeavoring to organize a stock company to establish a tobacco factory.

Florence—Oil Mill and Fertilizer Factory.—The Florence Cotton Oil Co., previously reported, have let contract for their mill buildings to P. J. Duffy, of Charleston. The buildings will consist of one, two stories, 40x50 feet, one 50x68 feet, and one 58x50 feet. They intend adding a fertilizer factory by next spring.

Graniteville—Glass Factory.—C. B. F. Lowe, of Augusta, Ga., and others will establish a glass factory near Graniteville and have let contract for building to T. O. Brown, of Augusta. They will put in two furnaces and manufacture window glass and bottles.

Greenville—Bridge.—L. K. Clyde will receive proposals until July 27 for building the new bridge over Reedy river, lately mentioned.

Greenwood—Oil Mill, &c.—The capacity of the cotton-seed oil mill lately reported as to be built by the Greenwood Oil Co. will be 20 tons daily. Machinery has been ordered. They will have a fertilizer factory also.

Harper's—Tram-road.—Edward Harper contemplates building a tram-road to Potato Ferry, 3 miles.

Manning—Laundry.—Gustavo Alexander and others are organizing a stock company to establish a steam laundry.

Marion—Tram-road.—H. T. Young will probably build a tram-road.

Newberry—Cotton Mill.—The Newberry Cotton Mill will probably add 1,000 spindles in the fall. Mill now has 10,112 spindles and 330 looms.

Rock Hill—Oil Mill and Fertilizer Factory.—A. D. Haller has contracted to erect the factory buildings for the Rock Hill Cotton-seed Oil & Fertilizer Co., lately mentioned.

Rock Hill—Cotton Factory.—The Rock Hill Cotton Factory Co. are repairing their factory.

Rock Hill—Machine Shops.—Creighton, Sherfese & Co. are erecting a machine shop.

Rock Hill—Water Works and Electric Plant.—Messrs. Roddy and Whitner are making efforts to organize a stock company to build the water works and electric-light plant lately mentioned.

Summerton—Oil Mill.—J. D. Rutledge, S. R. Cole and others are organizing a \$30,000 stock company to build a cotton-seed oil mill.

Union—Oil Mill and Fertilizer Factory.—The Union Oil & Fertilizer Co. is the name of the company lately reported as organized to build a cotton-seed oil mill and fertilizer factory. Capacity oil mill will be 20 tons daily.

Walterborough—Publishing.—C. D. Rice will publish a newspaper.

Walterboro—Railroad.—John C. Maloney, of Charleston, representing capitalists, is negotiating to purchase the Green Pond, Walterboro & Branchville Railroad. If purchased it will probably be completed.

TENNESSEE.

Arlington—Logging.—Cooper & Bodman expect to extend their logging railroad, reported last week. It is 3 miles long.

Chattanooga—Harness and Saddlery Factory.—John T. Howard, Frank H. Caldwell, John W. Elder and others have incorporated the John T. Howard & Co. Manufactory to manufacture harness and saddlery, vehicles, farming implements, etc.

Chattanooga—Machine Works.—The Bass Machinery Co., of Grand Rapids, Mich., contemplate locating a branch of their machine works in Chattanooga. They manufacture wood-working machinery, &c.

Chattanooga—Railroad.—John A. Moon, A. W. Chambliss, J. D. Imboden, of Abingdon, Va., and others will charter the Chattanooga & Virginia Railroad & Transportation Co. to build a railroad and operate steamboats for the carrying of coal from Virginia to Chattanooga.

Chattanooga—Electric Railway.—F. P. Henderson, H. P. Durand and others are considering the construction of an electric railway from Chattanooga to Sherman Heights.

Chattanooga—Electric Railway.—The Chattanooga, Mission Ridge & Chickamauga Railway Co. will extend their electric railway about ½ mile.

Chattanooga—Factory.—H. I. Kimball, of Atlanta, Ga., is negotiating to establish a manufacturing enterprise.

Chattanooga—Brick Works.—The Tennessee Paving Brick Co., reported last week as organized, will soon build works.*

Chattanooga—Publishing.—C. C. Murray and others will publish the Journal of Commerce.

Chattanooga—Railroad.—The Lookout Mountain Railroad Co., previously reported as to extend their railroad, have let contract to George S. & S. W. Duncan. It will be about 1 mile long.

Columbia—Cotton Factory.—The Columbia Cotton Mill Co. expect to greatly enlarge their mill soon, but have not decided as to how much.

Covington—Laundry.—Mr. Steele will establish a steam laundry, and has ordered machinery.

Covington—Water Works.—C. R. Corliss has received a 25-year franchise and will build water works on the stand-pipe system.

Cumberland Gap—Railroad.—The Cumberland & Big Gaps Railroad Co., previously reported as chartered, have let contract for the first 2 miles of their road to Mason, Hoge & King, of Frankfort, Ky., and contract for 8 miles and a 900-foot tunnel to R. J. McCrann, of Lancaster, Pa. 13 miles more will be contracted for shortly. This will be the extension of the Cumberland Valley Branch of the Louisville & Nashville Railroad (office, Louisville, Ky.) to a connection with the Clinch Valley Branch of the Norfolk & Western Railroad, previously mentioned.

Dayton—Pump Works.—The Dayton Pump & Hardware Manufacturing Co., lately reported as chartered, are building works for the manufacture of their force pumps. A. G. Slawson and H. U. White are among the incorporators.*

Dayton—Oil.—Capt. Bridgman is prospecting for oil near Dayton.

Elizabethton—Timber Lands.—Northern capitalists have purchased 12,000 acres of timber lands it is reported. C. B. Toncray can probably give information.

Fayetteville—Saw and Planing Mill.—Pylant & Dickey, of Elora, contemplate moving their saw and planing mill to Fayetteville and enlarging it.

Greenville—Medicine Factory.—The Spencer Medicine Co., of Greene county, has been incorporated.

Hermitage—Railroad.—The railroad from Hermitage to Hermitage Junction, 3 miles, reported last week, will probably be built by the Nashville, Chattanooga & St. Louis Railroad Co. (office, Nashville.)

Humboldt—Railroad.—The Missouri, Tennessee & Georgia Railroad Co. will build the railroad from Humboldt to Kickman, Ky., 85 miles, reported last week. W. A. Crawley, vice-president, states that a permanent survey will soon be made and that work will be started at once. L. B. Wright is president and J. J. Williams, chief engineer.

Iron City—Lime-kiln.—A lime-kiln has been started.

Iron City—Gas and Oil Wells.—A syndicate is being formed to drill for gas and oil. Lands have been leased. The Iron City Co. can give information.

Iron City—Tobacco Factory.—A tobacco factory is to be started during August. The Iron City Co. can give information.

Iron City—Iron Furnace.—The Iron City Co. are negotiating to have the charcoal iron furnace built, lately mentioned.

Jackson—Brick Works.—The Jackson Brick Manufacturing & Contracting Co. are making investigations with a view to putting in machinery for burning their brick with oil as fuel, instead of coal and wood.

Jellico—Coal Mines.—Henry Werney, of Louisville, and B. F. Rooney, of Pittsburg, Ky., are prospecting with a view to opening coal mines on Watts' creek.

Johnson City—Iron Furnaces and Nail Mill.—Gen. J. T. Wilder states that arrangements are practically settled for the building of 4 large iron furnaces and a nail mill, and that a fifth furnace is assured.

Knoxville—Canning Factory.—J. L. Brity, of Baltimore, and S. L. Parker, of New

York, have been prospecting with a view to establishing a canning factory.

Knoxville—Marble Mill.—R. J. Roberts, Reys Jones, R. L. Lott and others will build a marble mill, and have secured a site. Machinery is reported as ordered. Charles M. Funck will be manager.

Knoxville—Electric-light Plant.—The Schuyler Electric Light Co. have bought a site to build a new and larger plant. It is to cost, it is stated, \$25,000.

Knoxville—Bridge.—The Knoxville Southern Railroad Co. will soon let contract for the construction of an iron bridge, with limestone substructure, to cost about \$200,000, over the Tennessee river.

Lebanon—Flour Mill.—The Farmers' Milling Co. has been incorporated to build a flour mill.

Memphis—Oil Works.—The Chicasaw Refining Co. have asked for permission to erect 6 sheet-iron tanks, 32 feet in diameter and 30 feet high, for the storage of refined cotton-seed oil.

Memphis—Huller Factory.—A factory will be established for the manufacture of cotton-seed hullers. L. E. Dyer is agent.

Memphis—Railroad.—The Tennessee Midland Railroad Co. have made financial arrangements, it is said, for the completing of their railroad. It is built to the Tennessee river.

Memphis.—W. I. Yopp, R. L. Wall, R. L. McKellar and others have incorporated the Wall-Mount Shoe Co.

Memphis—Machine Shop.—W. C. Ellis & Son will put a bolt-forging machine and probably a steam hammer in their machine shop.

Morristown—Woolen Mill.—Ohio parties are corresponding with the Montvue Land Co. with a view to establishing a woolen mill.

Morristown—Woolen Mill.—C. C. Rankin has renewed his proposition to move his woolen mill from Home to Morristown. If moved considerable additional machinery will be purchased.

Nashville—Iron Furnaces, &c.—The capital stock of the Nashville Furnace Co., reported last week as to operate the two charcoal iron furnaces and alcohol works at West Nashville, is \$200,000.

Nashville—Plaster Works, &c.—The Tennessee Adamant Co., reported last week as organized to manufacture wall plaster, tiles, &c., will build works at once. They will try to rent power. Ira B. White, of Norfolk, Va., is secretary and treasurer.*

Nashville—Electrical Railroad.—The McGavock & Mt. Vernon Street Railway Co., lately mentioned as to extend the use of electricity as a motive power over all their lines, will extend their Spruce street line now operated by horse-power.

Paris—Planing Mill.—Freeman, Lasater & Co. have put additional wood-working machinery in their planing mill.

Wallview—Cotton Factory.—A cotton factory is reported to be built. If true, J. C. Wall can give information.

Wallview—Dummy Railroad.—A company has been formed to build a dummy railroad to Jasper. J. C. Wall can give particulars.

Wartrace—Railroad.—The Nashville & Chattanooga Railroad Co. (office, Nashville) will extend their road from Wartrace to Petersburg. Work will probably soon be started.

TEXAS.

Atlanta.—The Atlanta Chemical Co. has been incorporated with a capital stock of \$10,000.

Childress—Flour Mill.—A flour mill will probably be erected.

El Paso—Ice Factory.—The El Paso Ice Co. have increased their capital stock to \$100,000.

Denison—Dummy Line.—The Denison Land & Investment Co., previously reported as to change the Denison Street Railroad to a dummy line, have purchased rolling stock. The line is six miles long.

Denton—Brick and Tile Works.—W. A. Ponder and M. W. Davenport have purchased the Denton Brick & Tile Works for \$6,000.

Dublin—Sugar Factory.—A sorghum sugar factory will be started, it is reported.

Dublin—Compress.—A cotton compress will probably be erected.

Dublin—Machine Shop.—The Fort Worth & Rio Grande Railroad Co. (office, Fort Worth) will, it is stated, build a machine shop.

Dublin—Water Works and Ice Factory.—A company is being formed to build water works and the ice factory previously mentioned. S. E. Gillett can probably give information.

Fort Worth—Stock-yards.—The Fort Worth Union Stock-yards, John R. Hoxie, president, have increased their paid-up capital stock from \$70,000 to \$200,000. They are building yards, as stated previously.

Fort Worth—Bridge.—The commissioners court have let contract to the King Iron Bridge Co., of Cleveland, O., to build an iron bridge at Daggett crossing to cost \$4,760.

Fort Worth—Machine Shops, &c.—The North Side Railroad Co. will erect a car-house 230x40 feet, and in connection with it machine and blacksmith shops for the repairing of cars and electric motors.

Galveston—Twine and Cordage Factory.—The Galveston Rope & Twine Co. have purchased a site for their twine and cordage factory previously reported.

Hillsboro—Flour Mill.—A roller process flour mill will probably be built.

Houston—Oil Refinery.—The Merchants' & Planters' Oil Co., lately reported as building a cotton-seed oil mill, are also building a refinery with a daily capacity of 400 barrels. Capacity daily of oil mill is 125 tons.

Laredo—Foundry and Machine Shop.—George N. Bonham, of San Antonio, is organizing the Laredo Foundry & Machine Co. to establish a foundry and machine shop.

Lasater—Lumber Mill.—The East Line Lumber Co. will put in a 60 horse-power boiler and make repairs to their lumber mill.

Lodi—Saw Mill.—William Dunn is negotiating for timber with a view to starting the saw mill reported last week.

Mineral Wells—Street Railway.—The Mineral Wells Street Railway Co. has been incorporated by J. C. Haynes, B. M. Franklin, M. B. Fryar and others. Capital stock is \$20,000.

Rusk—Publishing.—J. A. Padon has commenced the publication of the Herald.

Sherman—Belt Railroad.—A stock company is being organized to build a belt railroad. George W. Marshall can give information.

Sulphur Springs—Oil Mill.—George B. Boomer, previously reported as letting contract for a cotton-seed oil mill, has with others incorporated the Sulphur Springs Oil Co., with a capital stock of \$45,000.

Taylor—Laundry.—The steam laundry lately reported has been started by Powers & Bonnell.

Waco—Bridge.—The San Antonio & Aransas Pass Railroad Co. (office, San Antonio) have contracted for the construction of a bridge across the Brazos river.

Waco—Machine Shops.—Efforts are being made to have the Missouri, Kansas & Texas Railroad Co. (office, St. Louis, Mo.) move their machine shops from Taylor to Waco.

Weatherford—Brick Works.—A \$75,000 stock company has been organized, it is reported, to establish pressed brick works.

VIRGINIA.

Alexandria—Iron and Manganese Mines.—The Eureka Manganese Co. has been incorporated with W. S. Rosecrans, of Washington, D. C., president; T. J. McSpiden, of Baltimore, Md., vice-president, and J. M. Lackey, secretary, to mine and manufacture iron and manganese ores. The capital stock is to be \$50,000.

Appomattox C. H.—The Appomattox Land Co. have been incorporated with S. S. Burdett, president, and C. G. Beebe, secretary, to deal in real estate and to establish telegraph, telephone and stage lines between Appomattox C. H. and other points. The capital stock is to be \$250,000.

Big Stone Gap—Woolen Mill.—The woolen mill lately reported is being built by Sharp & Lewis.

Bolington—Creamery.—The creamery of R. B. Wright is being enlarged.

Columbia—Bridge.—W. R. Cocke & Bro. have received contract to rebuild the bridge across the Rivanna river.

Covington—Iron Mines.—The Stack, Dolly Ann and Iron Mountain mines, John S. Ham, superintendent, will increase their working force and make improvements.

Front Royal—Cotton Factory.—A stock company is being organized to establish a cotton factory. \$40,000 have been subscribed. George C. Davis is interested.*

Iron Gate—Rolling Mill.—The name of the company previously reported as to move a rolling mill to Iron Gate is the Iron Gate Rolling Mill Co. They have commenced the work of removal.

Liberty—Saw Mills, &c.—W. J. Langford will rebuild the two saw mills reported last week as destroyed by a flood. A grist mill was also lost.

Liberty—Reservoir.—The Liberty Water Works will build a reservoir. W. T. Fitzpatrick can give particulars.

Luray—Flour Mill.—The flour mill of the Luray Flouring Mill Co. has been purchased by W. M. Fielding, J. P. Grove, A. J. Huffman and others, who will increase the capacity and operate it.

Lynchburg.—The Lynchburg Real Estate & Loan Co. has been chartered with R. Morgan, president, and Samuel Williams, secretary.

Manchester—Oil Tanks, &c.—The Baltimore United Oil Co., of Baltimore, have applied for permit to erect tanks, stables, offices, &c., at the corner of Second & Hull streets.

Manchester—Land.—J. K. Ober, of Baltimore; Charles Watkins, of Richmond, and John E. Tyler have purchased 102 acres of land, and will divide into lots.

Norfolk—Sugar Refinery.—It is reported that a company is being worked up to build a sugar refinery. S. R. Borum can give information when anything is done.

Norfolk.—The Norfolk Real Estate & Investment Co. has been chartered with W. H. H. Trice, president, and Walter Sharpe, secretary. The capital stock is to be not less than \$25,000 nor more than \$150,000.

Norfolk—Brick Works.—F. H. Pendleton will move his brick works from North Carolina to Norfolk.

Norfolk—Railroad.—The Norfolk & Virginia Beach Railroad & Improvement Co. will change their road from narrow to standard gauge. Road is 17.8 miles long.

Orange C. H.—Creamery.—The Orange Manufacturing Co. will start the creamery reported last week.

Princeton—Lumber Mill.—R. G. Dennis, George W. Truitt and W. H. Vincent have purchased the lumber mill of W. F. Deal & Co., and will improve same.

Radford—Saw Mill, &c.—A large saw mill and wood-working factory are reported to be built soon.

Radford—Pipe Works.—Contract has been signed for the building of iron pipe

works with a daily capacity of 40 tons. The Radford Land Co. can give information.

Richmond—Bridge &c.—Ware B. Gay has bought the Mayo estate, including the Mayo bridge, and will make improvements. Price was \$100,000.

Roanoke—Canning Factory.—The Virginia Packing Co. will enlarge their canning establishment.

Saltville—Salt Works.—The rumor lately referred to that an English syndicate had bought the salt works of Palmer, Carpenter & Co., is not correct. An option has been given which will expire in October.

Wytheville—Electric-light Plant.—The Thomson-Houston Electric Co. have contracted to light the city, and will erect an arc and incandescent plant. The Wytheville Electric Power & Improvement Co. will furnish power to run the plant.

WEST VIRGINIA.

Alderson—Machine Shop.—Lee & Bare have put new machinery in their machine shop.

Briartown—Coal Mines and Coke Ovens. The Upper Monongahela Coal & Coke Co., of Fairmont, previously reported, will open coal mines at Briartown and have let contract for building 500 coke ovens to Bennett & Talbert, of Fairmont.

Brooke County—Oil Wells.—The West Virginia Oil Co. have located six wells and will soon commence developing.

Charleston—Water Works.—A site for a new reservoir has been purchased, it is reported. Frank Woodman can give information if true.

Grafton—Electric-light Plant.—The Baltimore & Ohio Railroad Co. (office, Baltimore) will put an electric-light plant in their shops and will probably light the town.

Hawk's Nest—Coal Mines and Railroad. William N. Page has leased the Hawk's Nest Coal Co.'s property and will develop. He will build a railroad from the Chesapeake & Ohio to the mines.

Lewisburg—Cold Storage.—The Greenbrier Creamery Co. will add a cold storage department within 2 or 3 months and will want bids for the work.

Ravenswood—Railroad.—Roane county has subscribed \$31,000 and Ravenswood \$3,000 to the Ravenswood & Spencer Railroad.

Weston—Railroad.—The Clarksburg, Weston & Midland Railroad Co., reported last week as letting contract for changing gauge of road from narrow to standard, are surveying for a 45 mile extension of their road to the Elk river in Braxton county. The extension is to be narrow gauge for the present. Contract will probably be let by August 15.

Wheeling—Stove Works.—The Joseph Bell Stove Co. have put bending machinery and made other improvements in their stove works.

Wheeling—Steel Works.—The Wheeling Steel Works are repairing and improving their steel plant.

Wheeling—Oil Well.—An oil well will be sunk on the farm of J. B. Noble, 11 miles from Wheeling.

FLOUR MILL TO BE REMODELED.—UNIONVILLE, MD., July 9, 1889.—I will remodel my mill to the roller system. Will have it started by the last of August. Capt. E. D. Danner has built a creamery in this place also.

ERNEST W. PEARRE.

ELECTRIC PLANT TO BE ENLARGED.—MERIDIAN, MISS., July 12, 1889.—We have had our plant in operation since January, and we are doing well with it. We are going to purchase machinery to enlarge our plant in the course of 90 days or so. We would be glad to receive correspondence.

THOMSON-HOUSTON ELEC. LT. CO.

New Southern Banks.

Baltimore, Md.—The Chesapeake Loan & Savings Association, capital \$100,000, has been incorporated by Charles Norberg, John Eslinger and others.

Belair, Md.—The Harford National Bank has declared a semi-annual dividend of 5 per cent.

Blakely, Ga.—A bill has been introduced in the legislature at Atlanta to charter the Blakely Bank.

Bryan, Texas.—The Merchants and Planters' National Bank, lately reported as organized, has \$100,000 capital. J. N. Cole is president.

Clarksville, Tenn.—The Clarksville National Bank has declared a semi-annual dividend of 6 per cent. and added \$5,000 to surplus. This bank has earned 21 per cent in the last year.

Columbia, S. C.—The Farmers and Merchants' Bank, capital \$100,000, has been chartered with T. D. Jervey as president; C. A. Chisolm, vice-president, and Arthur Lynch, treasurer.

Dade City, Fla.—A bank will be started by H. A. Parker, of Tavares.

Eastman, Ga.—A bill has been introduced in the legislature at Atlanta to charter the Citizens' Bank.

Florence, Ala.—The Florence Loan & Trust Co., capital stock \$100,000, has been organized.

Florence, Ala.—The First National Bank has increased capital stock from \$50,000 to \$100,000. Bank commenced business March 1.

Fort Gaines, Ga.—A bill has been introduced in the legislature at Atlanta to incorporate the Bank of Fort Gaines.

Gainesboro, Tenn.—The Gainesboro Bank is to be started soon with H. W. Williams as president. Capital will be \$30,000.

Greenville, S. C.—The Greenville Savings Bank has declared a semi-annual dividend of 2 per cent. and added 13 per cent. to surplus.

Griffin, Ga.—The Merchants and Planters' Bank, lately reported as organized, has a capital of \$100,000. J. D. Boyd is president.

Memphis, Tenn.—The Shelby County Savings Bank is being organized.

Middlesborough, Ky.—Hiram Blaisdell, of Boston, Mass., will probably be interested in the Middlesborough Bank, lately reported as organized with \$100,000 capital. It will be a national bank.

Middlesborough, Ky.—Two State banks are reported to be started at once.

Monticello, Fla.—Messrs. Andrews and Trask, of Plant City, have started the bank referred to last week. Name is Bank of Monticello.

Nashville, Tenn.—The Nashville Trust Co., reported last week as chartered, will have a capital stock of \$250,000. They will not do a banking business.

Natchez, Miss.—A savings bank will be started by A. & M. Moses and others.

Norfolk, Va.—The Bank of Commerce has declared a 5 per cent. dividend for the past 6 months.

Shelbyville, Tenn.—The People's Bank has declared a 5 per cent. semi-annual dividend and added 5 per cent. to surplus.

Walton, Ky.—The Walton Deposit Bank, lately reported as organized with D. B. Allen as president, has a capital of \$150,000.

Waycross, Ga.—A bill has been introduced in the legislature at Atlanta to incorporate the South Georgia Bank.

WILL BUILD RESERVOIR.—LIBERTY, VA., July 15, 1889.—We will put in reservoir at a very early date.

LIBERTY WATER WORKS.

Building Notes.

Abbeville, Ga.—A brick college is to be built. J. R. Allen can probably give information.

Americus, Ga.—Hotel.—Mayor Felder is making efforts to organize a stock company to build a \$100,000 hotel.

Anniston, Ala.—W. H. Williams will erect a large three-story brick building on the corner of 10th and Wilmer streets.

Anniston, Ala.—L. H. Kaplan will erect six brick store buildings.

Baltimore, Md.—The Bethany Methodist Church will enlarge their chapel and build a parsonage at a cost of \$12,000.

Baltimore, Md.—Ordinances appropriating \$21,000 for a new building for No. 5 English grammar school, \$25,000 for a new building for No. 5 English-German school, and \$18,000 for a new building for No. 31 primary school have been signed by the mayor.

Baltimore, Md.—Simon Schott will erect a two-story brick buildings on Central avenue; Theodore Hooper, a three-story brick dwelling and two-story brick stable on Calvert street; Mrs. M. J. Bennett, a three-story brick warehouse on Pratt street; James E. Swain, 24 two-story houses; E. Ottinger, a three-story brick warehouse on German street; W. T. Phillips, 7 three-story brick buildings on Mosher street, and Conrad Ritz and Edward Gail, a two-story brick buildings on Chester street.

Baltimore, Md.—J. T. Oster will receive proposals until July 27 for erecting the four-story (and basement) building 54x90 feet, of brick and granite, for the Manual Training School, lately mentioned. The cost will be about \$25,000.

Birmingham, Ala.—William Cutcliff will build five store buildings on First avenue.

Birmingham, Ala.—Drennen & Co. will erect three four-story brick buildings. The Gilreath Construction Co. have the contract.

Briartown, W. Va.—The Upper Monongahela Coal & Coke Co., of Fairmont, have awarded contract for 50 houses.

Brunswick, Ga.—The Jekyll Club will improve their property at a cost of \$60,000. A casino will be built.

Chattanooga, Tenn.—The contract to complete the Richardson Building, previously reported, has been awarded to D. J. Chandler at \$65,000. It will be six stories.

Chattanooga, Tenn.—W. E. Lou will build a \$6,000 dwelling, and the People's Grocery Co., a store building.

Clarksville, Md.—A new edifice will be built for the St. Louis' Catholic Church. It is to be 75x40 feet and cost about \$13,000. M. O'Connor & Son, of Baltimore, have the contract. John K. Stack, of Baltimore, is the architect.

Clifton Forge, Va.—A branch of the American Building & Loan Association has been organized with John N. Wright, secretary.

Cloverport, Ky.—Hotel.—A \$100,000 stock company has been organized to improve the Tar Springs Summer Resort, 4 miles from Cloverport. They will build a new hotel by next summer. The Commercial Club can give particulars.

Coffeeville, Miss.—A site has been purchased for the Wynn Preston Institute building.

Cookeville, Tenn.—Putnam county will erect a poor asylum.

Covington, Tenn.—The county court has awarded the contract to build the courthouse lately reported to W. F. Boone & Son, of Clinton, Ky., at \$23,000.

Dallas, Tex.—Contract has been let for the erection of a Catholic orphanage at Oak Cliff to cost \$7,350.

Danbury, N. C.—Hotel.—The organization of a stock company to build a hotel is talked of.

Dawson, Ga.—The First National Bank will erect a bank building.

Durham, N. C.—A building and loan association has been organized with Alexander Walker, president, and J. H. Southgate, secretary.

Durham, N. C.—C. H. Norton has received contract to build the new church for the Presbyterians, previously reported.

Easton, Md.—Hotel.—The hotel lately reported as to be built by J. F. Turner and others will be of brick, three stories, and about 60x90 feet. Hydraulic elevator will be put in. No contracts have been let. Jackson C. Gott, of Baltimore, is preparing plans.

Elkton, Md.—William Slingerly, of Philadelphia, Pa., will erect a three-story brick and marble bank building 26x60 feet.

Florence, Ala.—A branch of the Southern Building & Loan Association has been organized with E. B. Comly, president, and J. G. Middleton, secretary. The authorized capital stock is \$5,000,000.

Fort Worth, Texas.—The Odd Fellows will erect a four-story building 50x95 feet to have steam heat and elevators and to cost about \$30,000.

Franklin, Ga.—A building and loan association has been organized by Hon. Don Caffery, Hon. M. J. Foster and others. The capital stock is \$50,000.

Greenville, Ga.—H. P. Blalock will receive proposals until August 6 for the erection of a fire-proof building, 24x44 feet, with a fire-proof vault 12x20 feet. Specifications can be had on application.

Harrisburg, Ark.—The Harrisburg Male and Female College has been organized by Hon. T. A. Stone, J. J. Mardis and others to build a college.

Houston, Texas.—The building previously reported as to be erected by W. L. Foley will be three stories, 50x80 feet, and is to have elevators. The cost will be \$12,000. E. T. Heiner is the architect.

Houston, Texas.—The board of school trustees are receiving bids for the erection of a new schoolhouse.

Houston, Texas.—Browne & Bollfrass will erect a three-story brick store building to cost about \$5,000. Mr. Heiner is the architect.

Jacksboro, Tenn.—A new edifice will be built for the Methodist Episcopal Church.

Knoxville, Tenn.—R. S. Payne is digging for the foundation of his seven-story brick building, previously reported.

Lake City, Fla.—A dormitory building will be erected for the college. A. J. Russell can give particulars.

Lancaster, S. C.—The Bank of Lancaster contemplates erecting a bank building.

Little Rock, Ark.—Fletcher & Holtze have let contract for the erection of their cotton warehouse, 100x150 feet, reported in last issue, to Delaney & Collamore.

Little Rock, Ark.—R. A. Edgerton will receive proposals until August 1 for building the two-story schoolhouse, 70x80 feet, mentioned in last issue. It is to contain 73 rooms and to be heated by steam. The estimated cost is \$30,000. Thomas Harding is the architect.

Longview, Texas.—A branch of the Southern Building & Loan Association has been organized with J. P. Gibbons, president, and W. D. Fisher, secretary.

Louisville, Ky.—Hotel.—M. Clifford, of Birmingham, Ala., has purchased the Standiford Hotel for \$65,000 and will improve it.

Louisville, Ky.—Depot.—The Louisville & Nashville Railroad Co. have let contracts for their \$100,000 union depot, previously mentioned, as follows: bricklaying to Jacob Hoerty; galvanized iron work, Carpenter & Annear; slating, Charles Connor; stone masonry, Peter & Burghard; iron work, Sneed & Co., and carpenter work, Wood & Co.

Lynchburg, Va.—The National Exchange Bank will probably erect a bank building.

Macon, Ga.—The contract to erect the building for the Macon Library, previously reported, has been awarded to R. C. Wilder's Sons.

Manchester, Va.—B. J. Black has prepared plans for the new edifice for the Presbyterian Church previously reported. It is to be 63x113 feet and cost \$10,000.

Marianna, Ark.—Proposals for building the jail for Lee county, lately reported, will be received until July 23 by H. P. Rodgers. It is to be of brick, two stories, and is not to cost more than \$6,500.

Marion, S. C.—The Merchants and Farmers' Bank, W. J. Montgomery, president, will erect a bank building.

Meridian, Miss.—The Young Men's Christian Association contemplate erecting a \$5,000 building.

Milnes, Va.—The Milnes Building & Loan Association has been organized.

Monticello, Fla.—J. H. Perkins has started work on the brick opera-house reported last week. Seating capacity will be 520.

New Birmingham, Tex.—A branch of the American Building & Loan Association has been organized with a capital of \$50,000. R. L. Coleman is president, and T. M. Coleman, secretary.

Norfolk, Va.—New marine barracks will be erected. Hon. B. F. Tracy, Washington, D. C., can give particulars.

Notasulga, Ala.—The Notasulga Building Co. has been incorporated.

Norfolk, Va.—Hotel.—The Norfolk & Virginia Beach Railroad & Improvement Co. contemplate enlarging their hotel at Virginia Beach.

Paris, Ky.—O. T. Stark has received contract for carpenter work at \$5,737, and the Chattanooga Marble & Stone Co. for cut stone at \$2,800, for the new schoolhouse previously reported. The total cost will be about \$17,000.

Pine Bluff, Ark.—The Southern Grocery Co. will erect a two-story building 40x110 feet, and a two-story warehouse 148x110 feet. D. B. Riffin prepared the plans.

Radford, Va.—A party is negotiating for sites to build 20 houses.

Radford, Va.—The Radford Land Co. will build 40 houses for employees.

Raleigh, N. C.—The North Carolina Railroad Co., the Richmond & Danville Railroad Co. (office, Richmond, Va.) and the Raleigh & Gaston Railroad Co. will probably build a union depot.

Richmond, Va.—The Labor, Building & Loan Association has been incorporated with G. E. Johnson, president, and E. R. Harris, secretary. The capital stock is to be not less than \$5,000 nor more than \$500,000.

Richmond, Va.—A branch of the Southern Building & Loan Association has been organized with H. A. Tabb, president; William Simkin, vice-president, and W. Talley, secretary.

Savannah, Ga.—Lane & Malnate, of Washington, D. C., have received contract for the masonry work on the new postoffice and custom-house at \$11,657.

Savannah, Ga.—The Merchants & Mechanics' Loan & Building Association has been chartered by D. G. Purse, S. J. Wheaton, A. C. Wright and others. The capital is to be \$300,000.

Savannah, Ga.—The Wilcox & Gibbs Gun Co. will erect a six-story brick building, 70x155 feet, on River street. It is to have elevators operated by gas engines.

Sheffield, Ala.—James R. Crowe will receive proposals until July 23 for building a church. W. S. Hull is architect.

Troy, Ala.—Hotel.—Wiley & Murphree have purchased the Parker House and will enlarge and improve it.

Tuskaloosa, Ala.—The Tuskaloosa Female College is building a new hall.

Tyler, Texas.—The school board has decided to erect another school building.

Waco, Tex.—The Missouri, Kansas & Texas Railroad Co. (office, St. Louis, Mo.) will probably build a new passenger depot.

Washington, D. C.—Proposals for cut granite and blue stone work for tower to air shaft, and separate proposals for furnishing material and constructing air duct in connection with the tower, will be received by the architect U. S. Capitol until the 29th instant. Specifications for the same may be seen at his office.

Washington, D. C.—C. Sauter will erect two brick dwellings to cost \$6,000; M. Rouser, two dwellings to cost \$7,500; B. H. Warner, five three-story dwellings to cost \$30,000, and a three-story dwelling to have steam heat to cost \$20,000; T. F. Schneider is the architect, and John W. Phillips, five brick dwellings to cost \$18,000.

Washington, D. C.—The New Jerusalem Society will probably erect a church building. J. Barnard, 907 R street, N. W., can give information.

Washington, D. C.—M. W. Galt will build a two-story brick addition to the Children's Hospital on W street to cost \$30,000.

Wilmington, N. C.—The American Cotton-seed Oil Co. will build cotton-seed warehouses at Nashville, Rocky Mount, Whitaker, Battleboro and Weldon.

Winston, N. C.—The Richmond & Danville Railroad Co. (office, Richmond, Va.) will build a passenger and freight depot, and have bought a site.

BURNED.

Atlanta, Texas.—The planing mill of W. A. Scott, loss \$7,000, and a steam lathe and planer of I. W. Gainville, loss \$1,000.

Baltimore County, Md.—The saw mill of H. E. Shimp damaged by a flood.

Cleburne, Texas.—The planing mill of Henry Chambers; loss \$2,000.

Hagerstown, Md.—The hosiery factory of J. & A. Albert; loss about \$2,000.

Oxford, Ala.—The saw mill of R. F. McKibbin.

Troy, Ala.—The steam laundry of D. W. Branch.

Wilmington, N. C.—The planing mill, and sash and blind factory of Parsley & Wiggins; loss about \$25,000. Will be rebuilt.

Yeatesville, N. C.—The saw mill of the Beaufort County Lumber Co. damaged by a boiler explosion; loss about \$3,000.

RAILROAD TO BE EXTENDED—WESTON, W. Va., July 11, 1889.—The Clarksburg, Weston & Midland Railroad Co. will change its road between Weston and Clarksburg into standard gauge. Contracts have been awarded for bridges and trestling, tunnel and changing, curves and grades. Are surveying an extension of 45 miles into Braxton county to Elk river; this at present will be narrow gauge. Work will probably be let about middle of August. A. H. KUNST.

STOVE WORKS TO BE BUILT—BIRMINGHAM, ALA., July 8, 1889.—We understand that the O. K. Stove Co., of Louisville, Ky., are going to build a 10-ton stove foundry at once. They will want to buy a full line of machinery of every description for their plant.

BAXTER STOVE MANUFACTURING CO.

WILL REBUILD PLANING MILL.—WILMINGTON, N. C., July 15, 1889.—Our planing mill and sash and blind factory was burned on the 10th; loss about \$25,000; insured for \$7,000. Shall rebuild at once, and will want to buy engine, boiler and planing mill machinery at once, and later probably full line of sash, blind and door machinery. PARSLEY & WIGGINS.

SEVERAL LUMBER PLANTS BEING ERRECTED—BRYSON CITY, N. C., July 15, 1889.—Arthur Coffin & Co. have purchased at Erie, Pa., a 100 horse-power engine with which to operate their saw mill, planer, treenail lathes, band and circular saws, and machinery for making locust insulator pins. Material for mill is being prepared and part of the machinery received. McDonald & Fensone, of Alpena, Mich., have completed purchases of machinery, engine, etc., for the manufacture of doors, blinds, sash, etc. Machinery now on the way to this place. Browne & Clarke have their furniture factory in operation. The Tuckasee Lumber Co. have received their 50 horse-power engine and saw mill, and are busy setting it up on the Alarka creek, where they have secured a very large amount of the finest poplar timber. Bryson City will be their shipping station. Hill Bros. & Co. contemplate erecting stove mill and want machinery for cutting white oak staves. Mooney & Somerow have the contract for building the Baptist church. Ohio parties contemplate erecting veneering mill. LAKE & HODGE.

IMPROVING STREET RAILROAD—RICHMOND, VA., July 16, 1889.—We are rebuilding about three miles of track and have just finished about 2,600 feet new track. Are changing to an electric road.

RICHMOND CITY RAILWAY CO.

ERECTING SEVEN-STORY BUILDING—KNOXVILLE, TENN., July 15, 1889.—I am erecting a seven-story building, including basement for mercantile purposes. R. S. PAYNE.

STARTING MACHINE SHOP—AMERICUS, GA., July 15, 1889.—I am putting in iron and wood-working machinery at this place. I intend to put up a foundry another season. W. H. SAWYER.

CONTRACTED TO BUILD RAILROAD—SAVANNAH, GA., July 15, 1889.—We have received contract and commenced the construction of the Savannah & Western Division of the Central Railroad.

WRIGHT & STROTHER.

GOLD MINING IN MARYLAND—WASHINGTON, D. C., July 2, 1889.—The Pennsylvania Gold Mining Co. have purchased and are about erecting a 10-stamp mill on their property in Montgomery county, Md.

JAMES H. HOPKINS, Pres.

CONTRACT FOR FORTY MILES OF RAILROAD—LAKE CHARLES, LA., July 8, 1889.—We have a contract on the Kansas City, Watkins & Gulf Railroad of 40 miles. Commenced work on same June 22d, 1889.

KENNEDY & STONE.

WILL PUT IN NEW MACHINERY—CUMBERLAND, N. C., July 9, 1889.—The Cumberland Mills expect to put in 1,000 spinning spindles, some drawing frames and other machinery to replace old machinery, but will not increase except in what the new machinery will improve over the old.

O. A. ROBBINS, Treas.

TO MANUFACTURE PENCIL SLATE—GREENVILLE, ALA., July 9, 1889.—We anticipate going into the manufacturing of pencil slate business and desire all necessary machinery for same. JOSEPH STRINER & SONS.

BUILDING KNITTING FACTORY—LAKE CITY, FLA.—The Florida Manufacturing Co. at Lake City, Florida, have purchased knitting machinery, and everything necessary for a first-class knitting factory, which is now being put in position for operation, which will be commenced within the next 30 days. Mr. E. S. Anchincloss, of New York, is president of this company. THE FLORIDA MANUFACTURING CO.

MACHINERY WANTED.

If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.

Brick Machinery.—The Tennessee Paving Brick Co., Chattanooga, Tenn., will want boiler and engine, brick machines, shafting, pulleys, &c., as soon as organized.

Broom and Trunk Machinery.—John C. Priatup, Rome, Ga., wants information as to where machinery, either new or second-hand, for both broom and trunk factory can be purchased.

Broom and Whisk Machinery.—M. B. Fulghum, Griffin, Ga., wants to purchase broom machinery and machinery for manufacturing the Mexican fibre whisk brushes.

Bridge.—A. E. Smyrk, city commissioner, Baltimore, Md., will receive proposals until August 5 for furnishing and erecting the superstructure of an iron bridge on Cedar avenue. Plans and specifications can be seen at his office.

Compress.—James A. Benson, Washington, Ga., wants the address of manufacturers of cotton compresses.

Cotton Factory.—George C. Davis, Front Royal, Va., will want complete outfit of machinery for a cotton mill if he succeeds in organizing a stock company.

Cotton Machinery.—O. D. Carpenter, Harden, N. C., will want full outfit of machinery for a 2,500 spindle cotton mill if successful in organizing a company. Water-power will be used.

Crushing Machinery.—E. F. Brock, Mammoth Spring, Ark., wants information as to machinery for crushing sandstone into sand to be used for building purposes.

Desks, &c.—The District Commissioners, Washington, D. C., will receive proposals until August for furnishing and putting up 250 No. 1 grammar school desks and chairs; 300 No. 2 grammar school desks and chairs; 450 No. 3 grammar school desks and chairs; 350 No. 4 primary school desks and chairs; 100 No. 5 primary school desks and chairs; 450 high school desks and chairs; 30 teachers' desks and 25 teachers' tables.

Dust Collectors.—Benjamin Worley, Gatesville, Texas, wants prices of dust collectors for flour mills.

Electric-light Plant.—Thomson-Houston Electric-light Co., Meridian, Miss., will enlarge their plant and solicit correspondence in regard to machinery.

Electric Machinery.—J. C. Willcox, mayor, Darlington, S. C., want estimates as to cost of electric-light plants.

Electric Plant.—R. D. Cole, Sr., Newnan, Ga., wants bids on an electric-light plant for the Newnan Cotton Mills.

Flour Mill.—Brown & Saltee, Buffalo, Ky., wants roller machinery for their flour mill.

Governor.—Ferrill, Creal & Co., Buffalo, Ky., want a governor for a 20 horse-power Atlas engine.

Grain Drills.—G. Lauer & Co., Marietta, O., want address of manufacturers of grain drills.

Iron-working Machinery.—The Dayton Pump & Hardware Manufacturing Co., Dayton, Tenn., want at once machinery for doing all kinds of iron works—lathes, drills, planers, &c.

J. W. Jacobs, Assistant-Quartermaster U. S. A., Atlanta, Ga., will receive proposals for furnishing 17 running gears of wagons until August 12.

Lathe and Planer.—Cornish & Son, Nashville, Ark., will buy an iron lathe and planer.

Laundry Machinery.—C. E. Hudson, Summitt, Miss., wants prices on steam laundry machinery.

Locomotive.—Gaunt Crebs, Kirksville, Mo., will buy a locomotive in 30 days, and wants price-lists.

Machinery for manufacturing asphalt paving blocks is wanted by the T. J. Garling & Co. Granite Co., Macon, Ga.

Machinery for foundry and machine shop is wanted by E. S. Beaumont, Mayfield.

Mixing Machinery.—Wright & Evans, Jackson, Miss., want to purchase best automatic machinery for mixing bone meal, green marl, &c., for fertilizers.

Mixing Machines, &c.—Ira B. White, Norfolk, Va., will purchase mixing machines, sand dryers, belting, shafting, &c., for adamant plaster works to be built at Nashville, Tenn.

Moulder.—The Dillman Manufacturing Co., Paragould, Ark., want a moulder.

Oil Machinery.—S. R. Townsend, Red Banks, N. C., wants information as to cost and make of machinery for a 10-ton cotton-seed oil mill.

Oil and Fertilizer Machinery.—J. B. Scott, Cordele, Ga., wants quotations on machinery for a cotton-seed oil mill and fertilizer factory.

Planer, &c.—J. E. Hughes, Crest View, Fla., wants information as to cost and capacity of a No. 2 planer, &c.

Pulleys.—William Kern, New Orleans, La., wants quotations on pulleys for box factory, Dordgers' style.

Resaw and Dry-kiln.—A. H. Goodwin, Adel, Ga., wants prices on a good second-hand resaw and a dry-kiln for planing mill, f. o. b. cars at Adel.

Rope Machinery.—The La Grange Mills, La Grange, Ga., wants information as to cost of machinery, either new or second-hand, for manufacturing cotton rope from $\frac{1}{4}$ to $\frac{3}{8}$ -inch.

Saw and Planing Mill.—Charles S. Philip, 188 Pearl street, New York, will purchase machinery for a saw and planing mill to be built in Florida.

Saw, &c.—The Little Rock Chair Co., Argenta, Ark., want one short log saw, one pin rod and dowel machine and one vibrating mortiser.

Saw Mill.—Vaughan Bros., Glasgow, Ky., want prices on single rig saw mill to be run by 48-inch Success water wheel, 6-foot head of water, split pulley 73 inches in diameter and 14-inch face (iron) with iron rim, wrought iron pulley 24 inches diameter and 14-inch face, and wrought iron pulley 60 inches diameter and 14-inch face.

Saw Mill, &c.—H. H. Hornell, China, La., wants prices on saw mill machinery and supplies.

Shingle Machine.—C. H. Moffett, Ridgeville, S. C., wants lowest prices on new or second-hand shingle machine. State capacity.

Stave machinery is wanted by Hill Bros. & Co., Bryson City, N. C.

Stove Patterns.—The Eagle Foundry Co., Greensboro, N. C., state they will probably buy a set of stove patterns.

Stove Plant.—The O. K. Stove Co., Louisville, Ky., want a complete outfit of machinery for a 10-ton stove foundry.

Surfacer and Matcher, &c.—J. N. Martin, Alexandria, Ala., wants a double surfacer and matcher and a resawing machine.

Templates, Castings, &c.—Bernard R. Green, 145 East Capitol street, Washington, D. C., will receive proposals until July 25 for furnishing for the Library of Congress building 310 granite templates and bone-stones, 50 M skewback bricks, 4,000 M best hard burned brick, cast iron bricks, beam plates, wedges, and 81 M B. M. of lumber.

Tile Machinery.—E. W. Mort, Chilhowie, Va., wants to purchase a second-hand tile machine.

Tobacco-curing Plant.—Charles S. Philip, 188 Pearl street, New York, will purchase a plant, steam boilers, piping, &c., for a plant for heating and curing tobacco, to be erected in Florida.

Tray Machinery.—W. B. Ellis, Box 453, New Berne, N. C., wants catalogues of machinery for manufacturing wooden bread trays and other wooden vessels.

Well.—J. C. Willcox, Darlington, S. C., wants information as to best machinery and cost of same for utilizing an artesian well having flow at surface.

Wood-working Factory.—All machinery necessary for manufacturing pencil slats is wanted by Joseph Steiner & Sons, Greenville, Ala.

Wood-working Machinery.—The Industrial Manufacturing Co., Wilmington, N. C., want a 30 to 40 horse-power boiler and engine and machinery for manufacturing wooden butter dishes, berry baskets and crates, tobacco boxes, shuttle blocks, kindling wood, excelsior, &c.

Wood-working Machinery.—The Tampa Lumber Co., Tampa, Fla., want machinery for working up Spanish cedar in cigar-box stock, and fine surfacing planer for planing same.

Wood-working Machinery, &c.—Prices on turned and calendered steel shafting, $1\frac{1}{2}$ and 1 15-16 inch, cut to short lengths, bolts, iron, steel and general manufacturing hardware, iron trucks, rubber, kiln for drying oak, engine, boiler and wood-working machinery are wanted by J. H. Gardner, Dalton, Ga.

Wood-working Machinery.—Parsley & Wiggins, Wilmington, N. C., want new engine, boiler and planing mill machinery, and later probably a full line of sash, blind and door machinery.

EASTON TO HAVE A FINE NEW HOTEL.—BALTIMORE, MD., July 15, 1889.—I am preparing drawings for a hotel at Easton, Md., on a beautiful site, surrounded by trees and shrubbery, fronting about 240 feet on Dover and Harrison streets. It will be supplied with hydraulic elevators lighted by electricity and have all modern improvements. No contracts have been awarded.

JACKSON C. GOTT.

ENLARGING CANNING FACTORY.—ROANOKE, VA., July 15, 1889.—We are increasing our plant. Adding to our present business a general preserving business of fruits and vegetables. Have bought all the machinery we will need at present. Perhaps may add some more in the near future.

THE VIRGINIA PACKING CO.

WILL REBUILD SAW MILLS.—LIBERTY, VA., July 15, 1889.—The lumber and grist mills at A or North Otter, together with all tools and wood-working machinery is a total loss. The B or Big Otter Lumber mills, with fixtures, were also destroyed. I will rebuild in the near future.

W. J. LANKFORD.

THE West Point Forum says that the gentlemen who have charge of the cotton factory enterprise are permitting no grass to grow under their feet. The special committee sent to Wesson Mills for information about cotton mills made a favorable report, and work will now be pushed rapidly. The company has decided to put up a mill of 200 looms and 5,000 spindles, and manufacture sheeting, shirting, osnaburgs and rope. The building will be first-class, and the machinery will be the very latest improved pattern.

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Boiler Plate and Tank Iron, Lap-Welded Pipe and Boiler Tubes, Boiler and Sheet Iron Rivets, Steam Brass Goods and Engine Trimmings, Iron Valves and Fittings, Pipe Workers' and Machinists' Tools, Wood and Iron Pulleys, Belting, Hose and Packing, SEWER PIPE, FIRE BRICK and CLAY.

405 and 407 Elm Street,

Dallas, Texas.

A MOVEMENT is on foot at Louisville, Ky., to annex all the suburban towns, and thus increase the area covered by the city from 121 square miles to about 20 square miles. The hope is to bring the population of the city up to about 250,000 for the census of 1890 by this move.

A LIGHT gauge cut nail, designed to compete with the wire nail, has just been put on the market, several factories in Wheeling, W. Va., manufacturing them. They have not had sufficient chance yet for one to form any idea as to the success of their mission, but it is thought by some manufacturers that they will be successful.

C. R. MAKEPEACE & CO.
ARCHITECTS and MILL ENGINEERS
PROVIDENCE, R. I. Plans, Specifications and Estimates furnished for Cotton and Woolen Mills.

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PLANS AND SPECIFICATIONS FURNISHED FOR THE CONSTRUCTION EQUIPMENT AND ORGANIZATION OF COTTON AND WOOLEN MILLS.

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We never sleep. 5 West 4th St., CINCINNATI, O.

Baltimore Stock Exchange Quotations.

Reported by ALEXANDER BROWN & SONS, Bankers, Baltimore.

BALTIMORE, July 17, 1889.

	AM.	ASKED.
Virginia 6's Consols C.....	38	..
Virginia 3-4-5 10-40's.....	35 1/2	..
Virginia 3's, new.....	67 1/2	..
Virginia Consol Coupons, N. F.....	17 1/2	..
Virginia 10-6 Coupons, N. F.....	25	..
N. Carolina 4's.....	96 1/2	..
Norfolk Water 8's, C.....	128	..
Ga. Car. & N. bonds.....	100 1/2	..
Va. & Tenn. 8's.....	122	..
Wilmington & Weldon Gold 7's.....	115	..
W. & A. 6's.....	118	..
Atlanta & Char. 1st 7's.....	120 1/2	..
Atlanta & Char. Income 6's.....	120 1/2	..
Col. & Green. 1st 6's.....	103 1/2	..
Col. & Green. 2d 6's.....	80	..
Va. Midland, 2d 6's.....	118	..
Va. Midland, 3d 5-6.....	100 1/2	..
Va. Midland, 3th 5's.....	98 1/2	..
Char., C. & Aug. 1st 7's.....	97	..
Ga. Pacific 2d.....	82	..
West Nor. Car Cons'd 6's.....	92	..
Col. & V. Valley 6's, A.....	104 1/2	..
Cape Fear & Y. Valley 6's, B.....	101 1/2	..

ALEXANDER BROWN & SONS report sterling exchange: 48 1/2% for 60 days, and 48 1/4% for short sight; commercial bills 48 1/2% to 48 3/4%. France 5.16% for bankers' 60 days, and 5.14% for short sight; commercial 5.20% to 5.20 1/2%.

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—RICHMOND, VA.—

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BROWN, SHIPLEY & CO., LONDON.
Financial Agents of the United States Government in England.

The Southern Cotton Oil Co. and the Oil Trust.

Mr. Henry C. Butcher, president of the Southern Oil Co., telegraphed the MANUFACTURERS' RECORD as follows:

"Your editorial of July 6 in regard to this company is entirely at fault. You will please correct any statements you have made to the effect that the Southern Cotton Oil Co. has been absorbed by the Trust."

A letter was sent to Mr. Butcher calling his attention to the fact that statements to the effect that the Trust and the Southern Oil Co. had arranged a satisfactory "working combination" had been freely circulated in Wall street and published in the financial columns of New York dailies and elsewhere without eliciting any denial. To this the secretary of the company answered:

"Such reports of consolidation as have appeared in the New York papers and have come to our notice were not contradicted chiefly because we did not consider that their source of publication gave them enough weight to make such contradiction necessary."

We willingly give the Southern Oil Co. the benefit of this denial on the part of its president, but there are a few pertinent questions we should like to ask Mr. Butcher:

Did he and a majority of his board not make last year a combination with the Trust to regulate the price of seed by purchasing jointly and prorating the entire amount purchased?

Did the Trust not control his output of oil last year?

Why did John H. Michener, president of the Bank of North America, leave the board of the Southern Oil Co.?

Why did the Olivers and D. A. Tompkins leave the Southern Oil Co.?

Is it not true that the forming of this combination or pool was vigorously opposed by a minority of the Company; that the dissatisfied minority are now out of the directory and mostly out of the Company, and that the relations of the Company to the Trust are to be even more intimate the coming year than the past?

If the word "absorbed" does not properly express the relation of the business of the Company to the Trust, will Mr. Butcher then state just what he thinks it ought to be called?

Whatever may be said in the way of denying an "absorption" of the Company by the Trust, we do not believe the Southern Oil Co. occupies an independent position, in the sense of that independence being of any advantage to the man who has cotton seed to sell or cotton oil to buy. Whether the term used is "absorbed" or "combination" or "pool," the result, so far as the public is concerned, is the same.

THE Knoxville (Tenn.) Sentinel says in referring to the MANUFACTURERS' RECORD's exploring expedition in Tennessee and Kentucky:

The Sentinel commends most heartily this great enterprise and trusts that the Southern people who will be benefited by it will see to it that the MANUFACTURERS' RECORD is rewarded for its display of pluck.

THE exploring expedition of the MANUFACTURERS' RECORD, announced in last week's issue, has aroused widespread interest, and is universally commended as an undertaking of extraordinary magnitude, and of immense possible value to the South. Of the multitude of letters that have poured in upon us some are from subscribers in the North who write to thank us for the enterprise that will put them in possession of information much desired, but hitherto unobtainable, while subscribers in the South express their gratification at this further step in our work of making known to the world the resources and possibilities of the South.

It is gratifying to us to note the unvarying testimony to the eminent fitness of Major West for the important duties assigned him. While we were ourselves satisfied that we could not have made a more judicious selection, it is pleasing to have our judgment endorsed, and to be told that "knowing Mr. West, the fact that he has charge of the expedition is satisfactory assurance of the thoroughness and exactness of its work."

As will be seen in a letter elsewhere, Major West and his associates are by this time well started upon their important and arduous work.

THE attention of our dairymen is called to the fact that as good cheese can be made from Mississippi milk as from that of any other part of the United States says the Meridian (Miss.) News. "And why not? The grasses are as rich and succulent and as great a variety of them can be grown in this State as in any other State, and the milk is as equally rich in cheese making qualities. Like many other small industries which would pay handsomely in this State, cheese making has also been overlooked. The truth is we are too much given to overlooking small industries, or rather industries which can be started with comparatively small capital, and striving to inaugurate enterprises which we are really unable to do. Hence, in the failure to set the larger ones on their feet, we entirely forget the smaller industries which we could start, and we are consequently with very few manufacturing enterprises of any sort. It would be well to remember that the largest manufacturing establishments in the country, in many instances, started with single individuals, and that whenever a man has a good thing, no matter in what section it may be started, it will surely grow and find a market for its products. The experience of every manufacturing plant in this city abundantly proves this fact, and there is not a single one here that is not steadily growing. As has been repeatedly urged in this paper, one of the greatest sources of wealth to any country is in the conversion of its raw material into manufactured products, which are in demand right in

the section in which it is found, thus saving the cost of transportation, in addition to keeping the money paid for such products in circulation among our own people."

ACCORDING to the Arkadelphia Herald the vast resources of Arkansas are not at all understood abroad, nor appreciated at home. As compared to other States the fertility of her soil may be boasted of, her timbers are equaled by but few of her sisters States, Arkansas pine lumber having no superior; her mineral waters, in diversity as well as in curative properties, with the Hot Springs of Garland county, constitute her in that line the champion of the entire world, and her minerals and mechanical clays and stone as to these leave her unparalleled by any quarter.

PROPOSALS.

U. S. ENGINEER OFFICE, Wilmington, N. C. June 24, 1889.—Sealed Proposals for \$80,000 of Stone, Mattresses, &c., in place in dike in Winyaw Bay, S. C., are to be received at this office until 10 A. M. on 24th July, 1889. The attention of bidders is specially invited to Acts of Congress, approved 26th February 1885, and 23d February, 1887, volume 23, page 332, and volume 24, page 414 statutes at large. All information furnished by W. H. BIXBY, Capt. of Engineers.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 9 o'clock P. M. on the 6th day of August, 1889, for a clock in the tower of the U. S. postoffice, &c., building at Minneapolis, Minn. in accordance with the drawing and specification, copies of which may be seen at this office and the office of the Superintendent. Each bid must be accompanied by a certified check for \$100. JAS. H. WINDRIM, Supervising Architect. July 15th, 1889.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 9 o'clock P. M. on the 8th day of August, 1889, for all the labor and materials required to fix in place, complete, a low pressure return circulation steam heating and ventilating apparatus, for the courthouse and post-office, building at Fort Scott, Kansas, in accordance with the drawings and specification, copies of which may be had on application at this office and the office of the Superintendent. Each bid must be accompanied by a certified check for \$100. JAS. H. WINDRIM, Supervising Architect. July 16, 1889.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 9 o'clock P. M. on the 31st day of July, 1889, for constructing and putting in place, complete, the postoffice screen, furnishing and setting one set of vault doors and making certain alterations in partition walls required for the U. S. postoffice building at Springfield, Mass., in accordance with the drawings and specification, copies of which may be obtained at this office, and the office of the Superintendent. The drawings and specifications may also be seen at the office of the Mechanics' Exchange, Worcester, Mass. Bids must be accompanied by a certified check for \$100. JAS. H. WINDRIM, Supervising Architect. July 13, 1889.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M. on the 24th day of July, 1889, for the ceiling, framing, sash and glass required under the court roof, and for furnishing and setting in place complete, one pair wrought-iron gates at the Monument Square centre entrance of the United States postoffice, courthouse, building at Baltimore, Md., in strict accordance with the drawings and specifications, copies of which may be had on application at this office and the office of the superintendent. The drawings and specifications may also be seen at the office of the Builders' Exchange, Baltimore, Md. Each bid must be accompanied by a certified check, in amount \$50 for the wrought-iron gates, and \$100 for the ceiling, sash and glass under court roof. JAS. H. WINDRIM, Supervising Architect. July 3d, 1889.

PROPOSALS FOR PROVISIONS, CLOTHING AND SMALL STORES FOR NAVY YARD, NEW YORK.—July 9, 1889.—Sealed proposals, endorsed "Proposals for Provisions, &c., to be opened August 2, 1889," will be received at the Bureau of Provisions and Clothing, Navy Department, Washington, D. C., until 11 o'clock A. M., August 2, 1889, and publicly opened immediately thereafter, to furnish and deliver at the Navy Yard, Brooklyn, New York, a supply of provisions, clothing and small stores, consisting of corn meal, oat meal, rye flour, hominy, raisins, currants, prunes, cocoas, pickles, beans, canned tomatoes, coffee, sugar, canned vegetables, salt-water soap, pocket-handkerchiefs, jackknives, scissors, razors, razor-straps, scrub-brushes, eagle buttons, coarse combs, agate cups, bowls and plates, ivory buttons, rubber buttons, cotton duck, calf shoes, woolen socks, mattresses, blankets, tan duck, watch-caps, cotton socks, candles. The articles must conform to the Navy standard, and pass the usual naval inspection. The bids decided by lot. Blank forms of offer and specifications for the several articles required can be obtained upon application to the Commandant of the New York Navy Yard or to the Bureau. Applicants for specifications must designate the particular article for which the same are required. The Department reserves the right to reject any bid not deemed advantageous to the Government. JAMES FULTON, Paymaster General, U. S. Navy.

MESSRS. GODEFFROY & HOW, who have the contract from the Baltimore and Eastern Shore R. R. Co. to build a railroad from Broad Cave to Salisbury (a distance of 55 miles) are prepared to receive bids for grading in sections of five miles or more subject to bidders not subletting same. Apply GODEFFROY & HOW, Easton, Md.

NOTICE TO CONTRACTORS.—Sheffield, Ala., July 1st, 1889. Sealed proposals will be received at the office of the Sheffield Water Company, Sheffield, Ala., until 3 o'clock P. M. on the 6th day of August, 1889, for the furnishing of materials, tools and labor for the construction of a water-works plant at Sheffield. Plans may be inspected at the office of the undersigned, and copies of the specifications, instructions to bidders and schedule of quantities may be obtained by application to either. Proposals must be made upon the form provided and in strict accordance therewith, and each must be accompanied by a deposit or certified check for five hundred dollars (\$500) as a guarantee that if his proposal be accepted, the successful bidder will enter into a formal contract and will furnish within ten days after written notification a good and sufficient bond for its fulfillment. Checks from unsuccessful bidders will be promptly returned. Proposals will be received on the whole or separate parts of the work only as shown by the forms provided, and bidders are requested to examine the ground. The right is reserved to reject any and all bids. W. L. CHAMBERS, President. J. V. ALLEN, Sec'y and Treas.

NOTICE TO CONTRACTORS.

CHIEF ENGINEER'S OFFICE,
GEORGIA, CAROLINA AND NORTHERN
RAILWAY COMPANY.

CHESTER, S. C. July 4, 1889.
SEALED PROPOSALS addressed to the undersigned, endorsed on outside of envelope "Tender," will be received at this Office until 12 o'clock M. on SATURDAY, the 27th day of July, 1889, for the GRADUATION, MASONRY AND TRESTLES upon that part of the Georgia, Carolina and Northern Railway lying between Chester, South Carolina, and a point about five miles west of Clinton, South Carolina, being about fifty (50) miles in length. Profiles and specifications can be seen at this office, where printed forms of tender may be obtained. Contractors are requested to bear in mind that tenders will not be considered unless made strictly in compliance with the printed forms. The railway company reserves the right to reject any or all bids. R. H. TEMPLE, Chief Engineer.

Ferro-Magnesian SPRINGS FOR SALE.

Under a decree of the Circuit Court of Botetourt county, Va., the undersigned Commissioners will offer for sale privately, until Sept. 9th, 1889, and if not sold before that date, will then sell at public auction to the highest bidder, at Fincastle, Va., the above named

VALUABLE Mineral Springs,

situated one-half mile from Fincastle, Va., and consisting of one already developed and enclosed spring, and any other springs hereafter developed on that property.

This spring, for the medicinal vir use of its waters, has an

ESTABLISHED REPUTATION.

Geo E. Walton, M. D., author Mineral Waters, U. S. and Canada, Membre de la Societe Francaise d'Hygiene, etc., says: "I do not know of its equal of the kind (an alkaline and aperient chalybeate) in the United States, or in the world."

AS A SUMMER RESORT

This place has no equal in the mountains of Virginia.

THE HOTELS

Are crowded every summer, and many board in private families for want of other accommodations. A large hotel would be full every season.

For terms and further information, address either of the commissioners at Fincastle, Botetourt County, Va.

C. M. LUNSFORD,
C. H. VINES,
ROBERT G. JAMES,

July 8th, 1889.

Commissioners.

Machinery Wanted.

We want to buy latest improved Machine for making Spiral or Cone Springs used for all Spiral Spring Beds. **LOTTMAN BROS., Houston, Tex.**

WANTS.

FURNITURE MAN WANTED.—A skilled worker in furniture wanted by the Gadsden Furniture and Coffin Co., at Gadsden, Ala. An experienced man with two to four thousand dollars to put in, can find profitable employment, and will receive large dividends in capital employed.

WANTED.—A thorough, accurate and reliable man that can make plans and elevations, and understands the building business, and has had experience in ordinary iron and mill work, glass, etc., and can do all necessary correspondence and keep account. Salary \$1,500 per annum. Address "RELIABLE," care Manufacturers' Record.

A COMPETENT MAN is now open for an engagement as Superintendent of Cotton Mill. Has large practical experience. Is strictly temperate, and will guarantee to get as large a production as can be had from the machinery, and at as small cost as any mill. Address "EXPERIENCE," care Manufacturers' Record.

THE OWNERS OF A PATENT SPARK EXTINGUISHER desire a party with money to push sales. It is a perfect success, designed principally for agricultural engines. Small, handy, easily adjusted and so light that a canvasser can carry 25 in a buggy. Sold to limited extent with success last fall, but have not the money to carry on the business largely. Pays an immense profit and presents rare opportunity for moderate amount of money. The season in the cotton belt is about at hand and almost any territory can be secured. Would prefer giving an interest in profits but would sell also. Address **INVENTOR,** P. O. Drawer 61, Yorkville, S. C.

SOME ASSOCIATED CAPITAL

WILL RECEIVE

Investment Proposals

from first-class hands (only), in the South. Nothing boomed, watered or already margined, or lacking minute description in business shape will be considered. Name subscribed if correspondence follows.

Address

"INVESTMENT RESEARCH"

Care Manufacturers' Record.

GEO. T. McWHORTER, President, Chickasaw, Ala.

JAS. M. ALLEN, Secretary, Waterloo, Ala.

Capital Stock \$200,000.

THE

Waterloo Land, Mining & Mfg. Co.

of Waterloo, Lauderdale Co., Ala.

will encourage the location of manufacturing and industrial enterprises in the town of Waterloo by donations of town lots, mineral and timber lands, and stock of the company. Persons who contemplate engaging in enterprises of this character in North Alabama are requested to consider the advantages, present and prospective, of this point before deciding to locate elsewhere. Waterloo is situated on the north bank of the Tennessee river, below Colbert Shoals and consequently at the head of summer navigation on said river. During low-water stage light draft steamers run from Waterloo to Florence, Sheffield and other points above the shoals, freight being transferred at Waterloo. At this season goods may be billed from St. Louis, Cincinnati, Louisville, Evansville and all Western river cities to Waterloo cheaper than to any other town in Alabama. Chickasaw excepted. Waterloo is in the heart of the mineral belt, the immense beds of iron ore of Wayne and Lauderdale Counties lying in close proximity (5 to 10 miles). Limestone, silica and kaolin are abundant and close. The largest area of virgin forest in North Alabama lies in sight. The Land Company owns large bodies of this, together with many valuable town lots. The water supply is abundant and pure. Scores of springs bubble up within the town limits and the limpid waters of Second Creek wash the eastern border. The health of the community is unexcelled and the cost of living cheap. This is the largest shipping point for tan bark in the state. Present price of bark at landing \$4.50 per cord. Special facilities for tanning leather. The Land Company will donate a large body of fine timber and mineral land in a block to secure the construction of a railroad, north or east from Waterloo, such a road being needed in connection with the unequalled facilities of water transportation enjoyed by the town. Liberal aid will be given to persons who will locate industries here that give employment to labor and add value to raw material.

No matter what you intend to manufacture, consult the Waterloo Land, Mining & Manufacturing Co. and learn what facilities for the prosecution of your business the place enjoys and what inducements will be offered you to come. All questions truthfully and fairly answered.

For further information consult the President, Secretary or Hon. Hiram Richardson, Vice-President, Waterloo, Ala.

FOR SALE.**TEN THIRTY-YEAR BONDS**

of the denomination of \$500 each, of the school district of the town of Darlington, in the State of South Carolina. Rate of interest, six per cent., payable annually at the First National Bank, Charleston, S. C. Address C. S. NETTLES, Darlington, S. C.

Sulphur Mine**FOR SALE.**

The Louisiana Sulphur Mining Company offers for sale its sulphur property in Calcasieu parish, 80 miles west of New Orleans on the line of the Morgan Railway. Repeated borings have demonstrated the existence, 412 feet under the surface, of a very large bed of sulphur, 113 feet thick, ranging in purity from 65 to 90 per cent., averaging through the whole depth 77 per cent. For further particulars apply to

LOUIS BUSH, ESQ., President,

17 Tchoupitoulas Street, New Orleans, La.

HOME and BUSINESS.

A Modern Dwelling—Commodious and well arranged—almost newly furnished. Wells of water and convenient outhouses on an elevated and commanding site, with about

Thirty Acres Attainable.

belonging to me individually, and adjacent to the property of a Cotton Manufacturing Concern, in which I have a leading interest (with the chief paying position). Would be sold for value to a steady man of good business qualification. This desirable home and good business would be parted with in consequence of the death of my wife, leaving me lonesome, with a desire to move away.

About \$40,000 are invested in the Manufacturing and Mercantile Business.

The company is incorporated. The product is sold to customers as fast as made. There are over One Hundred Acres of Land, including the Broad Shoals of a Large and Never Failing Stream, on both sides, and naturally one among the prettiest and most desirable places in the Carolinas for a

Cotton Factory.

My associates are men of integrity and strict reliability. The business and property are unencumbered. Address

REMUS ROLAND,

Care Manufacturers' Record

FOR SALE.**DARLINGTON LAND IMPROVEMENT CO.**

Lots within the incorporate limits of the town of Darlington, and fine farming lands adjacent, for sale. Railroad facilities good. Fine graded school in town. For further particulars apply to J. J. WARD, President and Treasurer of Darlington Land Improvement Co., Darlington, S. C.

THE PROPERTY OF THE**Statesville Plow Co.****FOR RENT**

for a term of years at reasonable figures, or the property can be bought on good terms. The property consists of a foundry and machine shops of sufficient capacity to carry on a large and extensive business, also machinery for manufacturing all kinds of farming implements. A good and large workshop attached. Address **STATESVILLE PLOW CO., Statesville, N. C.**

FOR SALE.

1 Plate Planer.
1 12-in. Bench Slotter.
1 24-in. Double Lathe, 18 ft. bed; two heads, etc.
1 24-in. Lathe.
1 34-in. Double Driving Wheel Lathe. F. B. Miles make.
1 48x48-in. Planer to plane 18 ft. long, with two heads on cross-rail. Miles make.
1 54x54-in. Planer to plane 20 ft. long, with two heads on cross-rail. Miles make. Address

NILES TOOL WORKS,

HAMILTON, OHIO.

Second-Hand Tools**FOR SALE.**

Iron Planer, to plane 36x36 inches x 10 ft. \$450
Screw-Cutting Lathe, 20 inch x 10 1/2 ft., triple geared..... 650
Screw-Cutting Lathe, 18 inch x 11 ft..... 375
Handy Shaper, 24 inch stroke..... 375
Farrel Safe, inside measure 17 1/2 x 20 inches..... 75

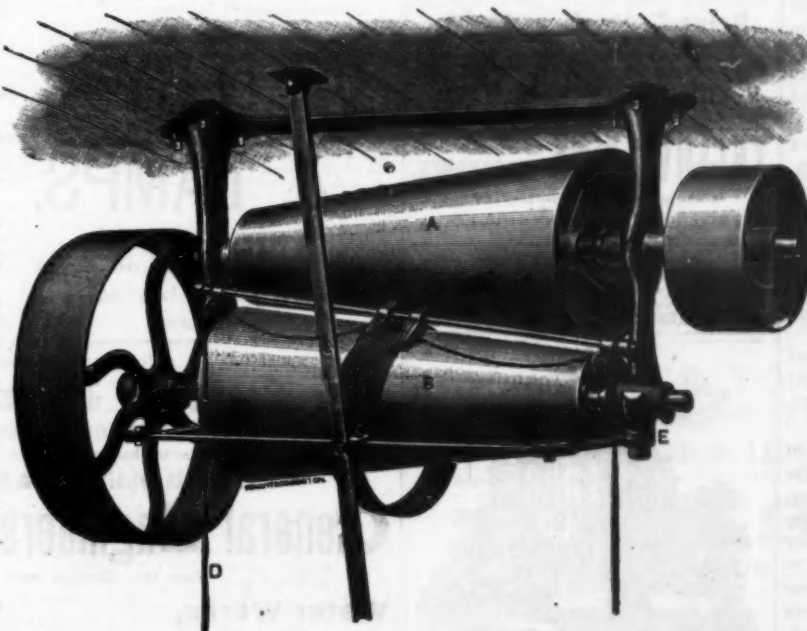
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FOR CHANGING AND REGULATING THE SPEED OF MACHINES.

The speed can be varied while the machine is running, or the machine stopped by simply turning a band wheel or moving a shipper. Straight-faced frictions on the same principle of a loose belt can be used to couple auxiliary power, or made to run power pumps. They are efficient and noiseless, and give operator entire control of machine. Send for illustrated catalogue to

**The following parties are using our Cones:**

Acme Machinery Co., Cleveland, Ohio.
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Syms & Dudley Paper Co., Holyoke, Mass.
Pratt & Whitney Co., Hartford, Conn.
Mason Locomotive Works, Taunton, Mass.
Russell Paper Co., Lawrence, Mass.
Rice & Co. Wire Cloth Works, Lowell, Mass.
Haverhill Paper Co., Haverhill, Mass.
Wilson, Cass Co., Philadelphia, Pa.
Fall Mountain Paper Co., Bellows Falls, Vt.
Chase & Co., Boston, Mass.
Waltham Emery Wheel Co., Waltham, Mass.
Rice, Barton & Fales Machine & Iron Co., Worcester, Mass.
Parsons Paper Co., Holyoke, Mass.
Hollingsworth & Vose, Groton, Mass.
Hollingsworth & Whitney, Gardiner, Me.
A. T. Dennison, Detroit, Mich.
Kiton Machine Co., Lowell, Mass.
Merrimac Mfg. Co., Lowell, Mass.
Troy Cotton & Woolen Co., Fall River, Mass.
Plymouth Woolen Co., Plymouth, Mass.
P. A. Dowd & Co., New York, N. Y.
John Cochran, Jr., Malden, Mass.
Holyoke Hydrant & Iron Works, Holyoke, Mass.
French & Ward, Stoughton, Mass.
Lowell Bleachery, Lowell, Mass.
Pacific Mills, Lawrence, Mass.
Washburn & Moen Mfg. Co., Worcester, Mass.
Geo. W. Paine, Providence, R. I.
American Tool & Machine Co., Boston, Mass.
Wilkinson Bros., Birmingham, Conn.
These embrace Cones of various sizes and patterns, and ranging from 1 to 50 horse power.

THE EVANS FRICTION CONE COMPANY,

85 WATER STREET, BOSTON, MASS.

Eastern Lumber Markets.

[Special correspondence MANUFACTURERS' RECORD.]

NEW YORK, July 17, 1889.

The higher range of prices for lumber and dimension stuff of all kinds has been accepted good naturedly by all buyers. People here don't care so much what they pay for anything so much as will they come out all right. Our building operations for the first six months foot up over forty-one million dollars, as against twenty-five million dollars for the first half of last year. Yard men report a good distribution, especially of stuff for inside finish.

A few words as to hardwoods. Some dealers say stuff is scarce, but lest this might influence some Southern mill men to hurry stuff in, the facts will be placed before them as they are. Poplar, despite the fact that there is not an over supply, has weakened a little, simply because there are parties offering to make deliveries at any time during the next ninety days at prices below ruling quotations. Just how this cut came about or was brought about it is not now necessary to discuss. Poplar can be had at \$30.50 to \$31, boards. Some are holding on in the rather vain hope that prices will advance one or two dollars, but of this there is hardly any hope. Only good widths, ten inches and over, bring outside prices. The question now is how long will even present prices hold. Will not holders rush in and sell lest a further decline takes place? Those who have cherry refuse to believe that it is not a good thing to hold. The stuff actually sold is going at off prices. Strips just now are in good demand. Those who want big money will have a long time to wait. At present bottom prices there is very little inducement to manufacture. Ash has had quite a steady run for two weeks, and yard men are buying from wholesalers to keep well supplied. About the only stock selling is stuff eight to twelve inches wide. Green stuff is hurried in under the idea that any sort of ash will sell, but good dry ash is kept scarce, and a good many are trying to buy for future delivery. Boards would bring a good price, and any manufacturers who have them might as well hurry them in.

When it comes to quartered oak there is not much to say. A good many are preparing oak that way, and in consequence prices are not as firm as they were. Still good boards bring \$47 to \$50, and the demand is fair.

Walnut is always moving. A certain few have practically a monopoly of it, and keep it by selling lower than most outsiders care to. The export demand is a fluctuating one—now active, now dull. One-inch culls are bringing \$35; rejects \$50 to \$52. One inch clear is worth and sells for \$90. Gum is gaining ground in certain quarters. It comes plain and quartered. It is a wood that could be worked into a large sale, but it would take work.

Down in Boston stocks are large and business is quiet. When contractors want lumber they go and buy it at set prices, which, of course, are low.

Yellow pine flooring is having, so to speak, a clear field. A good deal is arriving and going as fast into consumption. All kinds of yellow pine stuff is selling well and at prices which calls for the handling of an enormous amount of it to make money. Compared to last year prices are a little better, but the figures asked a month ago cannot be maintained. The manufacturers are busy, and expect to find a place for all their production. Random orders are quoted \$21 to \$22; car orders \$22 to \$23; heart-face boards \$20 to \$21; common sidings \$18.50 to \$14; flooring boards \$21 to \$22; stepping \$26 to \$28.

The old story about North Carolina pine

has to be repeated. Business is in excellent shape, but sellers have sometimes to put up with low prices. A great deal of stuff is under order for August and September delivery. No. 1 one-inch dressed flooring is \$22.50; No. 2 \$18.50; No. 3 \$16; 5-4 No. 1 \$25; No. 2 \$20. The mills are being run hard to take advantage of the present boom. Rough No 1 one-inch stock sells at \$21 to \$21.50; one-inch siding \$18.

Western markets are handling a great deal of stuff. The week's shipments at Cleveland for week were 7,128,000 feet lumber. Receipts over 10,000,000 feet.

In Minneapolis business is quiet and red oak is in abundant supply. In Chicago business was quiet during the first few days of the month, but later advices indicate an improvement. Southern lumber is making steady inroads into this and other Northern lumber centers, which it well maintains. To a certain extent production has overrun consumption, and the attempts to control the market are therefore unsatisfactory. The great activity of production in the yellow pine sections of the Southwest has depressed prices, and the trade must therefore be content to wait.

The aim of manufacturers of lumber is not to overcrowd the market, but the best intentions often fail. There is very little demand for railroad construction. House building demand everywhere is good.

Our advices from South Atlantic and Gulf ports all show considerable activity in the mills which ship to those ports. A great deal of work is under way in the interior, and the export demand from gulf ports is not falling off. Taking the lumber trade in general, prices are in favor of buyers, but to a certain extent that means in favor of sellers, for the lower lumber is the greater sale there is for it.

The various lumber associations are holding together with considerable spirit under discouraging circumstances.

W. EDWIN PEREGOY & CO.

WHOLESALE AND COMMISSION

LUMBER, LOGS AND STAVES,

113 S. GAY STREET,

P. O. Box 433. BALTIMORE, MD.

A. C. DANNER,

Mobile, Ala.

Yellow Pine Flooring and Ceiling,

Stepping, Finishing, Docking, Car Sills,

And all kinds of Rough or Dressed Yellow Pine.

THOMAS J. SHRYOCK & CO.

YELLOW PINE COMMISSION MERCHANTS.

Correspondence Solicited.

BALTIMORE AND WASHINGTON.

FOR SALE.

WOOD-WORKING MACHINERY, full

line, with latest improvements.

Write for circulars and price-list.

BENTEL, MAROEDANT & CO., HAMILTON, OHIO.



ENTIRELY NEW. HOME-LIKE. ELEGANT.
HIGHEST ELEVATION ON HANDSOME STREET
American Plan, \$3.00 to \$4.50 per day.
Telegraph for Rooms at our expense.
C. WARNER STORK, Proprietor.

THE CROWDUS Electric Fare Box.

The only perfect light at night. Simplest in construction. Easiest to clean. Registers each fare. Increases earnings. Exposes frauds. The smallest and neatest. Write for catalogue "B."

Electric Fare Box Co.
NASHVILLE, TENN.

JOHNSON, SHRYOCK & CO. HARDWOOD COMMISSION MERCHANTS.

Correspondence Solicited.

Office, - Shryock Building,
BALTIMORE.

Phoenix Incandescent Lamp Co. CHICAGO, ILL.

The Highest Quality.

The Lowest Price.

Can be used for any
Electric Light
System.

SATISFACTION GUARANTEED.

Series Lamps.

BATTERY & LAMPS.

Write for Circular and Price
List before buying
elsewhere.

MINOR SCOVEL, Pres.

H. S. JACKSON, Vice-Pres.

W. I. CHERRY, Sec. and Tres.

The Scovel & Irwin Construction Co.

OF BIRMINGHAM, ALA.

Address all correspondence to the Branch Office,

Cole Building, NASHVILLE, TENN.

General Engineers and Contractors

For the Design and Construction of

Water Works,
Sewerage Systems,
Railroads,

BONDS, STOCKS,
MORTGAGES,
AND OTHER
SECURITIES
NEGOTIATED.

Suburban Roads,
Blast Furnaces,
Fuel Gas Plants.

JOYCE, CRIDLAND & CO. DAYTON, O.

MANUFACTURERS OF

J. O. Joyce's Patent Lever Jacks,

Compound Lever



SCREW JACKS,
AND BENCH VISES.

50 varieties of Lever and Screw
Jacks for railroad use.
Please send for illustrated catalogue.

PAVE THE STREETS OF YOUR TOWN WITH THE Cylinder Sapless Cypress Paving Blocks.

THE BEST AND CHEAPEST PAVEMENT KNOWN.

The officer in charge of streets and bridges of Paris, France, reports: "Wooden pavements in Paris have had an incontestable success, due partly because it is better understood, and the work better executed than in any other towns. The public appreciates it strongly, and the administration have come to the conclusion that the subject of paving no longer presents any difficulties. That which one appreciates in wooden pavements is its noiselessness to those who live along the public streets and its evenness, and at the same time its elasticity, which renders the traction much easier, and the many advantages it possesses both for foot passengers as well as for horses and all vehicles."

The undersigned are prepared to ship the blocks by rail or cargo lots to any point, and will contract to pave streets in any state. For particulars write to

IMPROVED WOOD PAVEMENT CO.
Mobile, Ala.



\$80 will buy the best BAND SAW in the world. \$100 will buy our new PATENT 40-inch BAND SAW. \$185 will buy our new PATENT BAND RESAWING MACHINE. \$125 will buy the best AUTOMATIC RIP SAWING MACHINE, weatherboarding attachments included, and one 12-inch RIP SAW.

For further particulars address

STANDARD MFG. CO.
Moore's Hill, Ind.

FOR SALE.

One J. A. Fay & Co. No. 8 "Lightning" Floorer.
One J. A. Fay & Co. Self-feed Railway Cross-cut saw, almost new.
One Huyett & Smith Double Exhaust Fan.
One Egan Co. 36 in. Double Drum Sander, almost new.
One Egan Co. late style Wheel Boxer.
One 60 in. x 10 one-half Taper Sleeve Friction Clutch Pulley.
One Egan Co. 6 in. 2 ur-sided Molder.
All these machines have been thoroughly overhauled, and are guaranteed to be practically as good as new. Some of them have been used less than six months.

CORDESMAN MACHINE CO.

27 Butler Street, Cincinnati, O.

Alphabetical Index of Advertisers.

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Cars, Engines, Frogs
AND SWITCHES,
CARLISLE, PA.



HUYETT & SMITH MFG. CO.
DETROIT, MICH.

HOT BLAST DRY KILN APPARATUS,
For every kind of Hot Air Drying, Heating Shops,
Factories, etc. Forge and Pressure Blowers,
Exhaust Fans, Ventilator Fans, Dust Sep-
arators. Send for Circular.

The Filer & Stowell Co.
MILWAUKEE, WIS.

Saw MILL Machinery
OF EVERY DESCRIPTION.
Write for our prices.

FOR ANYTHING IN THE LINE OF
WOOD-WORKING MACHINERY,
CORRESPOND WITH
CORDEMAN MACHINE CO.
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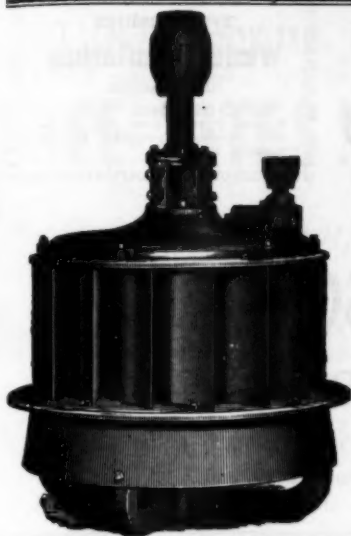


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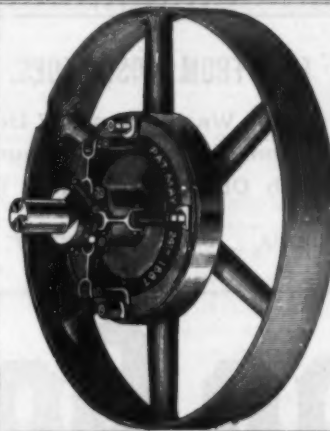
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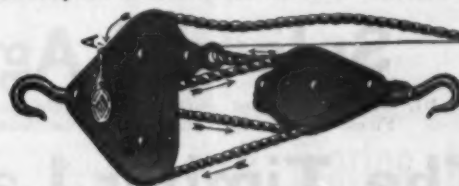
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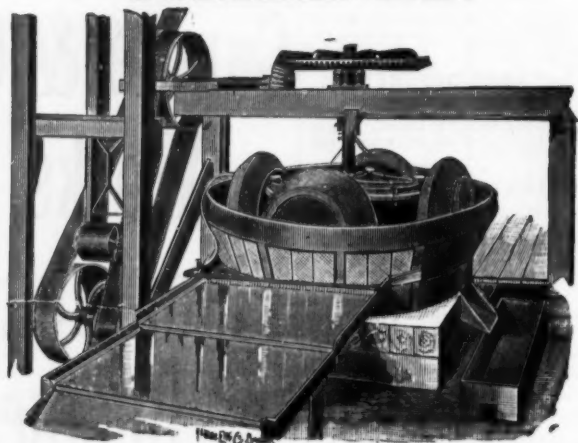
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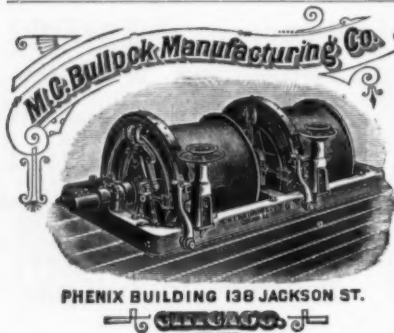
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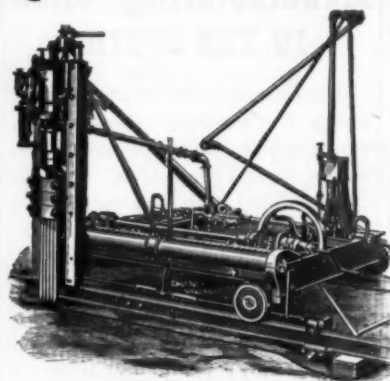
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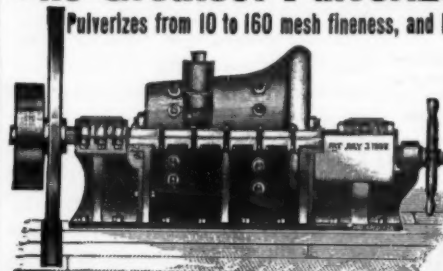
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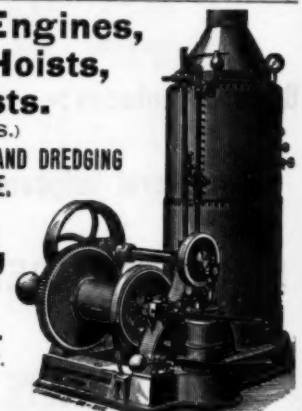
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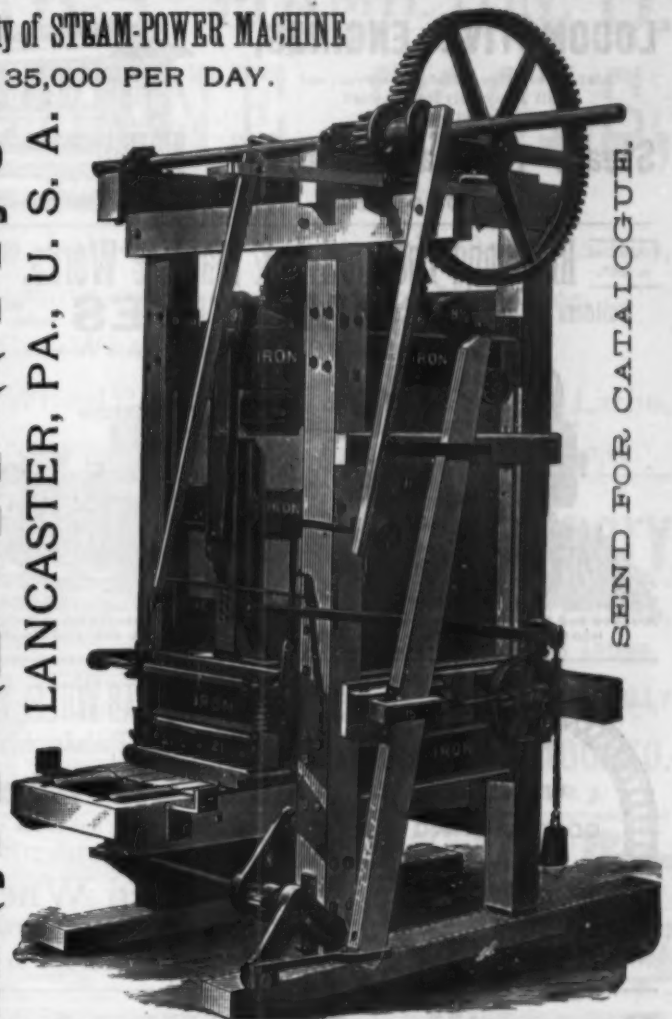
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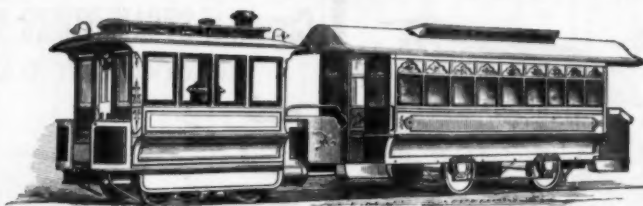
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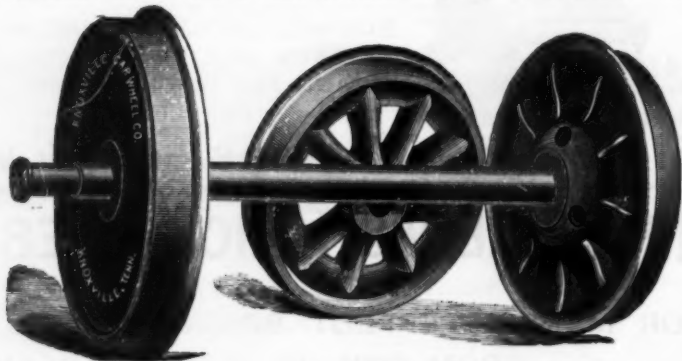
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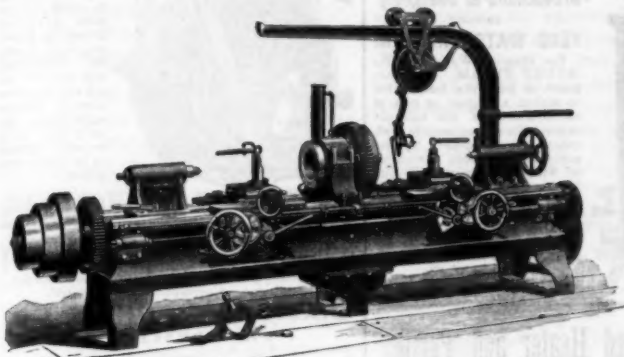
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Automatic Valves, set
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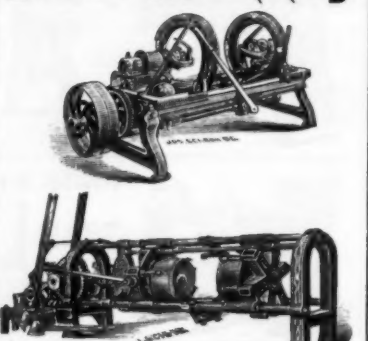
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It will relieve the engine from all back
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There is nothing to get out of order, and it
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It is the cheapest Feed Water
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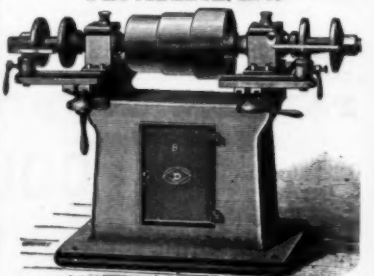
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LATLY
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Just the thing to
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Dynamoes, Blow-
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and slackens
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us to quote you
prices.

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Grinding & Polishing Machinery

In all sizes and every description. Send for
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PROVIDENCE, R. I.



Southern Agts.—T. K. CAREY & BROS., Baltimore.

The Belden Machine Co.

NEW HAVEN, CONN.
And in every particular Beats the World.
DROPPING TO ORDER.
Improved Upright Power Hammer.
Send for Circular.
Costs Less for Repairs;
Occupies Less Space;
Requires Less Power.

Rome Foundry & Machine Works,

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Manufacturers of the well known
DAVIS DOUBLE TURBINE

Water Wheel

Beyond all question
one of the best
wheels on the mar-
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guaranteed.
Send for Illustrated
Catalogue and Price List.
ALSO MANUFACTURE
**Portable & Stationary Engines
AND BOILERS,
Grist & Flouring Mill Machinery.**

TRADE NOTES.

THE Laidlaw & Dunn Co., of Cincinnati, O., have sold two of their one-million gallon standard duplex steam pumps to the Georgetown (Ky.) Water Works. They are now filling orders for six of this capacity.

MR. H. H. MANSFIELD, dealer in railroad and contractors' supplies, and agent for Messrs. A. Whitney & Sons, Frankford Steel Co. and Harkins' Foundry Co., has removed his office from 36 Pine street to 52 Wall street, New York.

FRANK W. SWETT, who manufactures band saws in Chicago, has found it necessary to enlarge his facilities and has now established himself at 68 and 70 South Canal street. He is now established in his new quarters, and, with better facilities, will be able to fill orders more promptly than ever.

AN excellent opening for a man with some money to invest is offered in the advertisement of Remus Roland, in another column. Not only is an interest in a well-established and good-paying business offered for sale, but also a good home with considerable land. It is seldom that the two openings are so conveniently combined.

THE Statesville Plow Co., of Statesville, N. C., offers through our advertising columns its well-equipped plant, consisting of foundry and machine shop and the necessary machinery for the manufacture of all kinds of farming implements, with a large workshop attached for rent for a term of years, or the property can be bought on easy terms. See advertisement for particulars.

THE Reliance Gauge Co., of Cleveland, O., have received, through the Variety Iron Works, another order for five of the Reliance safety water columns from the Brooklyn Street Railway Co. for the boilers which they are adding to their electric motor plant. They have also recently received second and third orders from Moerlein Brewing Co. and the Windisch-Muhlhauser Brewing Co., of Cincinnati. Both of the latter order came through the Laidlaw & Dunn Co.

AMONG the recent purchasers of the patent friction covering for pulleys manufactured by the National Pulley Covering Co., of Baltimore, are: Geo. T. Smith M. P. Co., Jackson, Mich.; Danville Lumber & Manufacturing Co., Danville, Ill.; Georgia Manufacturing Co., Athens, Ga.; Marburg Bros., Baltimore, Md.; Texas Tram & Lumber Co., Beaumont, Tex.; Scott Fertilizer Co., Elkton, Md.; Connell Bros., Woodstock, N. B., Canada; Mason & Hamlin Organ & Piano Co., Cambridgeport, Mass.; Manhattan Shirt Mills, Paterson, N. J.; Henry McShane & Co., Baltimore, Md.; The Glendon Co., Boston, Mass. The company have recently appointed McGowan Bros., San Francisco, as their Pacific coast agents, and the New Orleans Railway & Mill Supply Co., of New Orleans, as agents for Louisiana.

THE Ferro-Magnesian Springs at Fincastle, Va., as will be seen by our advertising columns, are offered for sale. This is a piece of property worthy of more than passing notice, as it is situated in the beautiful mountain region of Virginia. The water of these springs have already an established commercial reputation. To any one seeking to establish a health and summer resort, this property would be well worth a close investigation. Such summer resorts are fast becoming popular, and it is seldom that a better bargain than this is offered. The water possesses remarkable medicinal powers, and Fincastle is a charming place for a summer resort. It is crowded every summer with boarders from the far South, and a good hotel in connection with this mineral spring is badly needed.

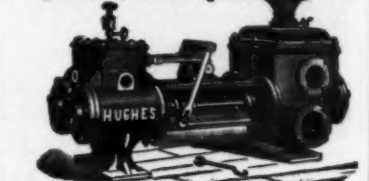
ELECTRICITY is being very rapidly introduced in the South, and, in order to be on hand and to be ready to introduce electric railways and power stations at short notice, the Daft Electric Light Co., of 115 Broadway, New York, has appointed Mr. Charles B. Steele agent, with headquarters at Savannah, Ga. The success that this company has had in establishing electric plants and railways and maintaining them economically will be appreciated by those who seek to introduce electric power. Mr. Steele is at present at the Palaski House, Savannah, and will always be ready to give any information desired.

THE "Swift" Lubricator FOR Steam Engines, Steam Pumps, &c. A PERFECT SIGHT FEED, Without the use of Glass Tubes. Send for photograph, circular and prices. The "Swift" Lubricator Co., ELmira, N. Y.

"THE COLLIAU" NEW AND IMPROVED HOT BLAST CUPOLA, (patent March, 1884), and New Smokeless and Automatic Feed Boiler (pat. 1886, in U. S.). Correspondence solicited for plans of foundries and the economical working of cupolas, the saving of fuel in melting iron and steel, and in the production of steam. Address VICTOR COLLIAU, Mechanical Engineer and Architect, 287 Jefferson Avenue, Detroit, Mich.

BRICK AND TILE MACHINERY BEST IN THE WORLD. Send for circular & prices. J. W. PENFIELD & SON Willoughby, Ohio. Stands Unrivaled. Patent Lock Box 96

STEAM PUMPS For every duty. Best Materials only used. Fully guaranteed and tested. It will pay you to write for prices. HUGHES STEAM PUMP COM'Y. CLEVELAND, OHIO. Donegan & Swift, New York Agents.



DON'T BUY AN ENGINE OR BOILER Until you have seen our circulars. Engines complete from 5 to 110 horse power, both Vertical and Horizontal, at prices below those of other reputable makers. 1400 in use. Boilers of every style. Automatic Engines for Electric Lights. Centrifugal Pumping Machinery for Drainage or Irrigation. Established 35 years. Perfect satisfaction guaranteed. Ask for Circular M and address

Morris Machine Works, BALDWINVILLE, N. Y.

QUEEN LUBRICANT—Wanted a good house in every city and town to handle our Lubricant. Our goods have been well introduced. EUREKA MFG. CO. Foot E. 5th St., New York.

PERFORATED METAL FOR COTTON SEED OIL MILLS RICE MILLS MINING SCREENS &c. THE ROBERT AITCHISON PERFORATED METAL CO. 76 Van Buren St. Chicago, Ill.

PERFORATED METAL FOR COTTON SEED OIL MILLS RICE MILLS MINING SCREENS &c. THE ROBERT AITCHISON PERFORATED METAL CO. 76 Van Buren St. Chicago, Ill.

DANVILLE, VA.

The City of Danville lies in Pittsylvania county, Virginia. It is picturesquely situated on the South bank of the River Dan, about 65 miles above the town of Clarksville (where the Dan and Staunton rivers form the Roanoke) under which name the blanded currents flow in broad, majestic streams through the fertile plains and stately forests of Eastern North Carolina, until lost forever in the briny expanse of Albemarle sound and the boundless "Ice Atlantic."

The city occupies the central concave portion of a graceful horseshoe curve of the river, which at this point is broad and shallow, broken into musical rapids by the bed of uneven granite rocks, over and among which it leaps and sparkles and sighs, as it carries its message of greeting from the mountains to the sea.

On the north side of the river, and facing Danville, stands her charming daughter, North Danville. The river banks on either side rise gently from the water's edge, until a height of a 120 feet or more has been reached. Three bridges, half a mile apart, span the stream, affording ample means of communication between the opposite shores and adding immeasurably to the natural beauty of the scene. The lower of these bridges is the property of the Richmond & Danville Railroad Co., the other two are wagon and foot bridges and both free.

The city covers an area of about 7,000 acres. Its population in 1880, according to the census returns, was 7,335; in 1885 it is about 16,000.

Danville is distant 65 miles from Lynchburg, 140 from Richmond, 200 from Norfolk and 245 from Washington. Its elevation above tide-water ranges from 410 feet at river's edge to 589 at West Main street terminus. Between Danville and Clarksville the entire fall is 125.87 feet, or an average of 2.17 feet to the mile, the maximum slope of the rapids being 10 feet to the mile.

In 1880-81, Mr. J. H. Gill, assistant engineer, made an official report to the War Department, from which the following is an extract:

"Danville is a town of 7,500 inhabitants. Situated at Danville Falls, its resources of water-power for manufacturing are very great, but this power is utilized to but a slight extent, the greater part of the business energy of the place being concentrated in the tobacco trade and manufacture, that staple being the principal one of the country tributary to Danville. There are 25 manufactories of twist and plug tobacco, three stripping and stemming houses and 73 repressing and brokers houses. The improvement of the town in 5 years is shown by the following returns:

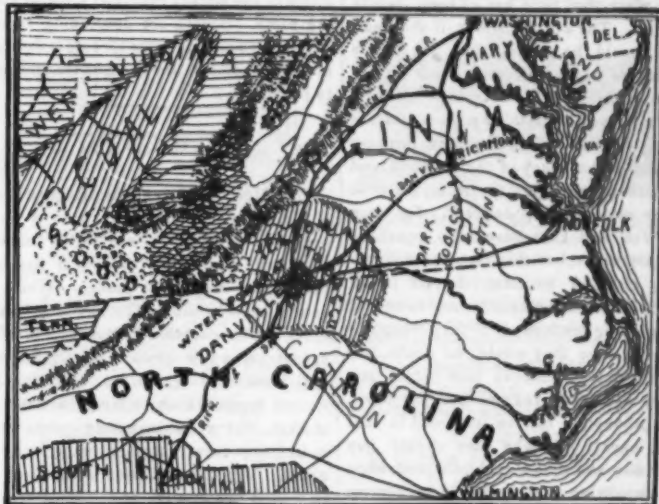
Population in 1873, 5,130; in 1878, 7,500.

Real Estate Assessed Value, in 1873, \$1,937,375; 1878, \$3,340,000.

There are two grain mills, a foundry and machine shop, a planing mill and a deer and cash factory. The Richmond & Danville Railroad runs through the town, and the Virginia Midland Railway terminates there. Two narrow-gauge roads are projected from this point, one to run up the valley of the Dan, the other into Henry county.

A free bridge connects the town with the small village of North Danville, and another wagon bridge is in construction near the west end of the town.

The above report describes Danville very fairly as she was 10 years ago, but in that interval she has grown and improved at a rate seldom surpassed. The narrow-gauge railroads "projected" then have become accomplished facts, and a source of much comfort and benefit to Danville and the country it penetrates. The "small village" of North Danville has expanded into a full-blown town, with its own mayor and common council. And the "wagon bridge," then in course of construction, has now done nine years' good service, while a handsome iron bridge has replaced the other one of this use at that time, and both of these bridges belong to the city, and three splendid cotton factories, two grain mills, box factory, ice factory, electric-light machinery, &c., are now in full blast, and run by water-power, where there was but one machine shop and one mill in 1880.



MAP SHOWING LOCATION OF DANVILLE, VA.

The scenery around Danville presents a charming and endless variety of hill and valley, field and forest, natural beauty and artistic embellishment, while everywhere are to be seen unmistakable tokens of thrift and industry, energy and enterprise.

In general appearance, the town of Danville is unique in its exceeding attractiveness. Its public buildings, churches, colleges, hotels, mills and factories are mostly new and all handsome and substantial. Its residences are the perfection of neatness and refined taste. Its principal streets are wide, well paved and well shaded with ornamental trees; moreover, during the busy seasons the sidewalks are so thronged with well-dressed, prosperous-looking country men and women, and the road-ways so crowded with carriages and wagons drawn by sleek, well fed and high-bred horses, that locomotion is seriously obstructed for the time being. Its merchants, manufacturers and professional practitioners are for the most part young, active and intelligent to a degree rarely seen in the great commercial cities of the North and West. The railroad facilities are also excellent.

The Richmond & Danville Road gives connection with all the great systems North and South. The Virginia Midland runs to Lynchburg, where connections can be made to all points West, North and East. The Danville & New River (narrow gauge) Railroad runs to Patrick C. H., and has a branch line to Leesville, N. C. The Virginia Midland has a branch which runs to Rocky Mount and Franklin county, and a daily train to Danville, and the Atlantic & Danville is now laying the rails on its road, with over two miles completed, making direct from Norfolk to Danville. This railroad is pushing for the coal beds of Southwest Virginia, and when carried through to Bristol, as is contemplated, will make Danville exactly in the center of a direct line from that point to Norfolk. It must be apparent to every unprejudiced mind, that with the completion of this road, Danville will rise in commercial importance, and by reason of her situation and immense back country is destined to grow in the next decade immensely larger than she now is.

Tobacco, Danville's great staple, and its manufacture, her great industry hitherto, will doubtless continue to hold its place as foremost among her sources of wealth and prosperity. It may suffice to say here that this is the largest bright and fine loose leaf tobacco market in the world being the center of the "bright leaf," and handling more than half of its gross product. There are nearly two hundred handsome buildings in the city devoted to the curing, stripping, pricing and otherwise handling the golden leaf and to manufacturing it into the various forms of plug and twist.

Danville can boast of seven banking establishments, all of which are in a healthy financial condition, and are ready at all times to render material aid to progressive commercial operations.

REMEMBER

That Danville has a most Healthful Climate.
That there is no competition at all in Certain Lines of Business.
That Money is made here.
That the people are Sociable, Energetic and want MANUFACTURING ENTERPRISE.
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DANVILLE, VA.

THE MARKETS.

OFFICE MANUFACTURERS' RECORD,
BALTIMORE, July 17, 1889.

The influence of Southern iron on Northern markets has begun to be felt strongly. The recent advance on standard Northern brands was effected not so much by or through any increased demand as through the withdrawal of offers by Southern makers and an advance at the same time to new buyers on iron to be delivered from 30 to 90 days hence. When the situation came to be understood by the trade, the upward tendency was seen as a thing unavoidable. But it does not follow that all of the future production held at an advance will sell as per quotations. The weaker companies, especially in Pennsylvania and Ohio, are as willing as ever to sell iron away down as ever and buyers know it. For all that buyers are not trying to buy heavily. A good steady business is being done in mill and forge irons, and the same condition of trade will probably continue for the summer. The last monthly reports shows in one paper 34,142 tons per week and 89 furnaces blowing, in another 29,811 tons per week and 104 furnaces blowing on anthracite iron. In bituminous irons the estimates of the authorities referred to were 96,548 tons, weekly capacity from 136 furnaces, and 89,356 tons and 131 furnaces, respectively. Taking the western authority for comparison, we find that a year ago the anthracite output was 28,176 tons weekly, and bituminous 74,743 tons weekly. The increased output since that time has all been quietly marketed. The accumulations, if the small stocks should be so regarded, are barely sufficient to protect buyers against an unfavorable fluctuation of prices that is liable to develop itself any time under a spurring demand. The Southern furnaces evidently hold the key of the situation, and the Southern managers are in no haste to sell for more remote delivery. Pig iron rates West and East have been equalized in Pennsylvania, but this fact has not materially changed business. Buyers in all markets do not know exactly how to regard the hardening tendency. If they thought it would continue they would, no doubt, buy largely. The bituminous iron output last January was nearly 104,000 tons per week, and if production can be increased to that extent, buyers ask why they should buy largely now and thus stimulate a production and competition that is likely to depress prices. Anthracite production last winter was well on to 40,000 tons per week. Why buy anthracite pig far ahead is asked, especially when Southern production is increasing and our home furnaces can turn out 10,000 tons per week more than they are. This is the common sense way that buyers are studying the problem. Quotations at tide-water points are \$15@15.50 for standard Northern forge; \$16@16.50 for No. 2, and \$17@18 for No. 1. The concessions in Southern corresponding makes are less than thirty days ago. Sales have been made in New York markets at strong figures. At Pittsburgh the threatened conflict between the Carnegie-Phipps firm and the union has been averted by concessions, in which the firm has been more liberal than the union. August sales of pig iron have been made at the usual advance over June prices. At Philadelphia an active business has been done at full prices on standard brands. In Chicago charcoal and coke irons are selling well, and at strong prices.

In finished iron liberal sales have been made, particularly in plate and shapes. Mills are generally full of work. The bar mills are feeling the improvement, and a good many concessions were quickly withdrawn last week, particularly in Western mills, where it is no easy matter to place an order at 1.50. Plate and tank orders have been quite numerous in Pennsylvania mills at 2@2.10; universal plates 2.25; flange

3.25. Bridge and building iron orders are dropping in every day at 2.80 for beams and 2.10 for angles. Inquiries are numerous for material from all quarters, and strong prices are readily paid on early deliveries particularly. All the sheet mills and pipe mills throughout the country are having a good run of orders and in a general way prices are higher than during the spring. The nail factories are not doing very well, notwithstanding the fact that the consumption of nails is enormous. Building operations in several Northern cities, in which reports have been compiled, show an increase of 25 per cent. in building operations. Steel rails are active in a small way on a basis of \$28@28.50. It is claimed that large lots can be had readily at \$27.50. The production of billets and slabs is heavy for a great variety of purposes. Old rails are wanted, but not at the outside prices ruling in most markets. The pipe line interests in Western markets are creating brilliant anticipations among mill men. Crop reports are having a good effect. Financial interests anticipate no stringency. The large exportation of gold will soon be followed by reactionary effects. The commercial reports show a heavy production and easy payments. A large fall trade is assured, and the leaders in commercial and manufacturing interests are full of faith and hope in good trade conditions.

HARDWARE.

No further changes of note have occurred in prices since our last edition, and the condition of the market generally remains about the same. Buyers are continuing to purchase in good quantities for future delivery, and the prospects for the fall trade appear to be good.

IRON.

CINCINNATI.—Messrs. Rogers, Brown & Co. write: "There has been a strong and even demand for iron during the week past, and a good run of orders has been booked for nearly all grades. While the general tone of the market is strengthening, there are no quotable differences in values except on a few grades, mostly Southern mill irons, silver greys, etc. Leading producers deprecate any attempt to boom the market, but a shade better prices is required to prevent absolute loss to many furnaces. The demand for charcoal iron has improved materially, and liberal transactions are reported. The feeling is hopeful in all branches of the iron trade."

LOUISVILLE.—Messrs. Hall Brothers & Co. write: "There has been no material change in the situation since last report. The market still remains firm, but transactions have not been in as large quantities, though more frequent. Some round sales of charcoal iron have been made at full figures."

LOUISVILLE.—Messrs. Geo. H. Hull & Co. write: "The market continues firm, and there has been a fair amount of buying during the past week. The trouble has been to secure deliveries and grades desired, as buyers accept present prices as representing the full value of the iron, and do not anticipate in future the possibility of doing better. Mill iron is especially active in demand, and for prompt delivery and large quantities, there is difficulty in obtaining it."

ST. LOUIS.—Messrs. Rogers, Meacham & Shields write: "The past week has been a quiet one. There is hardly any demand at present for Southern mill irons, so the late advance in those grades is not felt. Orders for foundry irons have been placed to a limited extent at about 50 cts. advance. As most of the furnaces have withdrawn from the market, offerings are restricted and a better feeling is quite firmly established."

CHICAGO.—Messrs. Rogers, Brown & Co. write: "There has been a good retail demand during the week past, and also considerable placing of contracts for round lots to be delivered during the remainder of the year. A number of good orders for Lake Superior charcoal brands have been taken, and there is a feeling of greater firmness in that specialty; no better prices, however, are quoted. The offers on Southern irons in this market are very light. The home furnaces are stiffening in their views. There is a fair demand for soft irons, and some good-sized lots have been sold."

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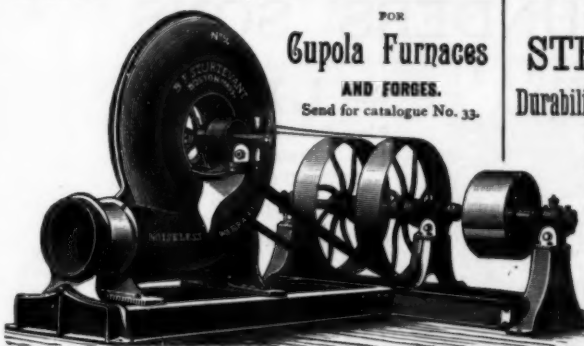
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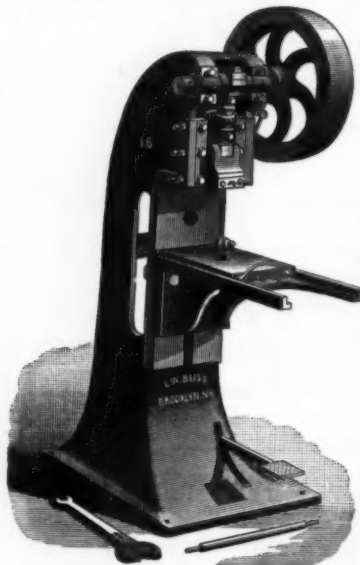
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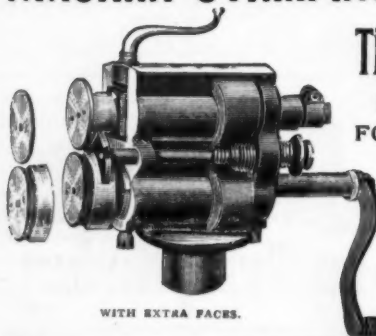
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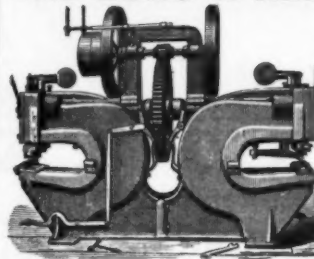
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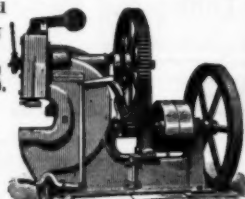


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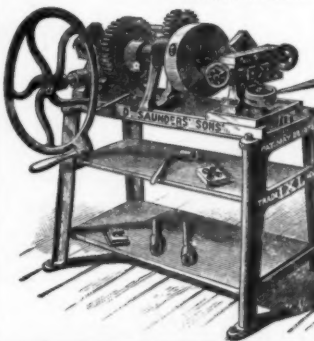
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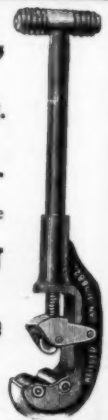
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40-Inch Bolting Saw With Power Friction Feed.

In the accompanying illustration is shown a 40-inch power feed bolting saw, all the parts of which are strong and well arranged, capable of performing a large variety of work.

chambers, thus securing a neat fit.

The feed, which operates the table, has two changes of speed, 90 and 100 feet per minute. The feed mechanism consists of a double internal friction gear, 26 inches diameter, 4-inch face for feed, and a 10-inch diameter, 4-inch face for return motion. Between these double-faced fric-

thus it returns promptly, causing no loss in time whatever.

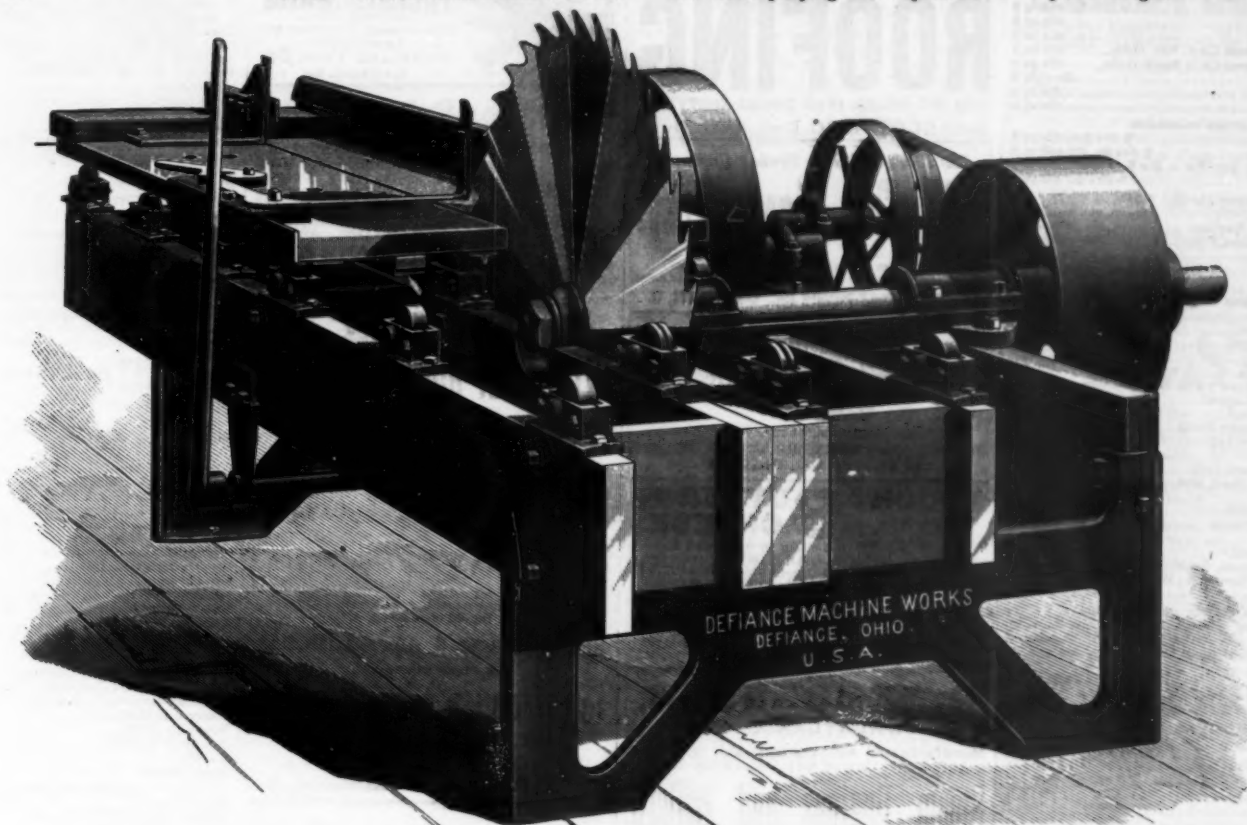
Defiance Machine Works, Defiance, O., are the manufacturers, and will give any further information desired.

Hand Power Punch.

The accompanying cut represents a

ter of a sheet 74 inches wide. It will punch an inch hole in $\frac{1}{2}$ boiler plate, and is perhaps the largest hand punch ever made.

All shafts, bolts and plungers are of steel. The distance from the center of punch to the front of the machine is only $\frac{1}{2}$ of an inch, thus enabling the operator to punch flanges.



40 INCH BOLTING SAW WITH POWER FRICTION FEED.

It is designed especially for cutting spoke, rim, shaft, pole, handle and picket squares from the log, and equally well adapted for sawing or re-sawing heading, box board stuff, quarter sawing, cutting plank and general ripping about a mill or factory.

Dogs and guides of a large variety for holding various material to the table are furnished. A very convenient attachment for holding thin material in re-sawing is represented in the engraving. On the opposite side of the saw a patent adjustable fence is shown, which can be quickly set to a scale in the table the desired distance from the saw, for regulating the width of cut.

This machine is capable of doing the same work where in many cases an expensive saw mill is used, with satisfactory results, having the advantages performing a variety of sawing.

As a spoke saw it is very valuable. The material can be cut with little or no loss. As the tables are low down, the material can be thrown from one position to another with ease.

The arbor is made of hammered steel, 2 11-16 inches diameter, with a wrought iron collar at saw end, provided with two $\frac{1}{2}$ inch steel dowell pins in a 4-inch circle, for securing the saw rigidly to the arbor.

The arbor boxes are cast in the form of a heavy bed plate, with ribs running their entire length. The bearings consist of genuine babbitt metal, each scraped to a perfect fit, provided with caps and large self-oiling chambers. The greatest care is taken in fitting these parts.

The table is made in two parts, and so arranged that they can be used together or independently. For some classes of sawing it is desirable to run only the outside table, setting the inside table at proper position to receive the material as it falls from the saw. The rollers on which the track travels are accurately turned, both outside diameter and the bearings, to exact size, and are provided with oil

tions, a 6x4 inch tar board friction driver is stationed, its shaft running in lever boxes connected by hand lever, as shown in the cut. By moving the lever from left to right, the frictions are engaged or disengaged, thus causing the table to start instantly in either direction or to stop at any point desired. The table has a return motion three times greater than the feed,

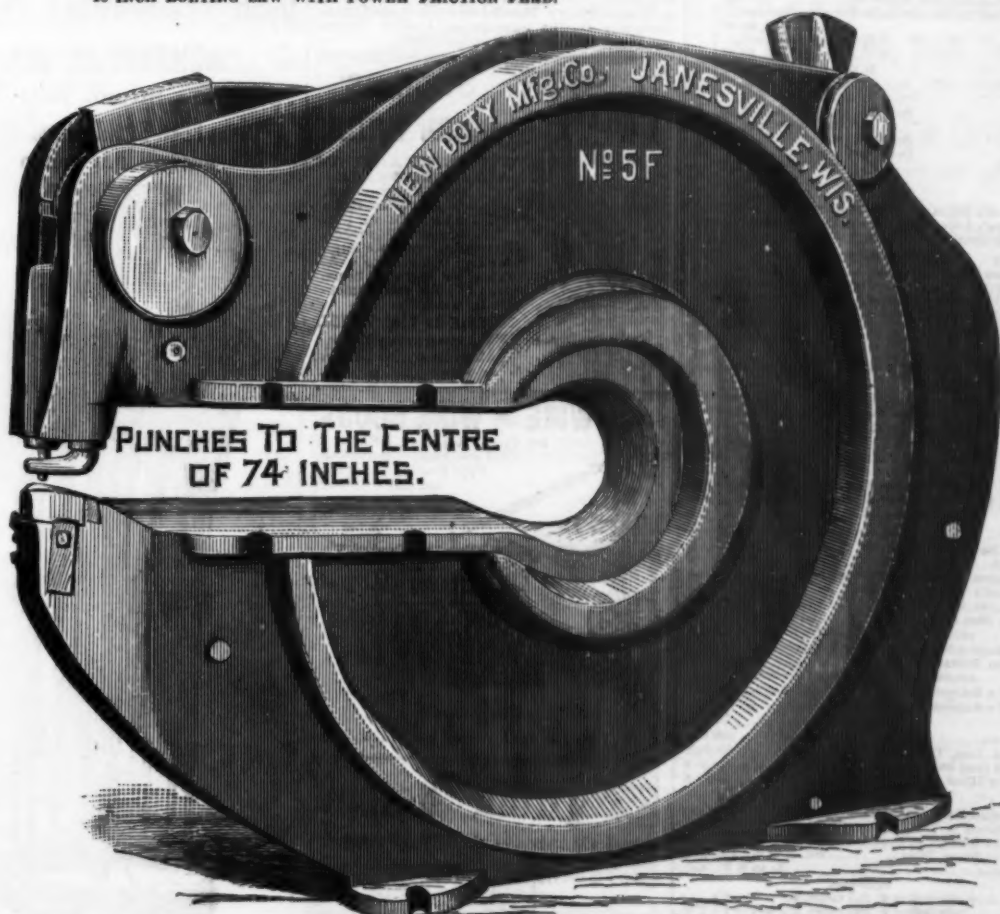
hand-power punch for the use of boiler makers and sheet-iron workers, made by the New Doty Manufacturing Co., of Janesville, Wis.

The company make these machines in ten sizes, the jaws varying in depth from 3 inches to 37 inches, and the cut represents the largest size to punch to the cen-

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Further information may be had of the company as above.

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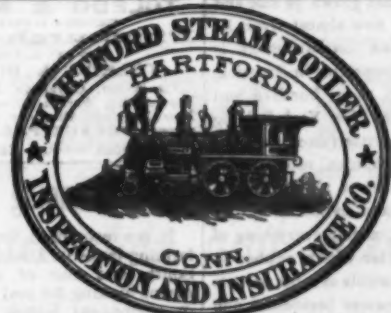
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TRADE NOTES.

CAPTAIN WILLARD L. CANDEE, treasurer of the Okonite Co., of New York, returned from his European trip on the 4th instant. He succeeded, besides taking several smaller orders, in making a contract with the city of Paris for 8,000 feet of Okonite telephone and telegraph wire. Captain Candee examined many important locations in England, with a view to establishing a manufactory there to supply the steadily increasing European demand for Okonite wires and cables.

TREVOR & CO., of Lockport, N. Y., send out a very neatly printed pamphlet descriptive of their wood-working machinery. The list of machines includes everything used in wood-working, such as spoke and axle-handle lathes, veneer cutting machines, drag saw machines, wood pulp machinery, log sawing machines, shingle machines, etc. The catalogue is nicely and completely illustrated, and well supplied with reading matter pertaining to the products of this firm, and to the industries in which these products are used. Wood-workers will find the catalogue of interest.

THE Druid Felt Co., of 7 South Gay street, Baltimore, issue a little pamphlet descriptive of their Druid fabric roofing and elastic paint for all material, whether metal, wood or other. The advantages claimed for this roofing are that it is proof against fire, acids, water and the weather. The fabric is made by a patented process. It is fastened to the sheathing boards or elsewhere by nails, then protected by two coats or more of paint, and by sand if desired. The material is of very light weight, of much strength and elasticity, and is economical to use. It is made in two grades and to suit all conditions and purposes. The pamphlet contains many recommendations and other interesting matter, and will be well worth a perusal by builders and property owners.

OLDEST AND LARGEST IN THE WORLD.—We notice that the enterprise of the New York Belting & Packing Co., New York, is attracting the attention of the daily press in that city. A writer of the New York World, in a recently published article of some length describing the rapidly growing manufacturing interests of Passaic, N. J., speaks of the company's factory No. 3 located there, as follows: "The greatest representative of the rubber industry is the New York Belting & Packing Co., the oldest and largest establishment of the kind in the world. The factory at Passaic is an annex or branch of the original works at Newtown, Conn., but since its establishment here in 1882 it has grown in size and importance, so that it now almost rivals its parent. The Newtown establishment is one of the finest mill properties in America, and employs between three hundred and four hundred men. The New York Belting & Packing Co. confines itself exclusively to the manufacture of mechanical rubber, such as belting, packing, hose of all kinds, rubber mats, car, wagon and cylinder springs and bumpers, in short, nearly everything of a mechanical nature for which rubber is used, and owns and controls several patents covering different processes incidental and indispensable to the making of the above goods, and particularly for machine belting, vulcanized between layers of a patent metallic alloy, by which the stretch is entirely taken out, the surface made perfectly smooth and evenly vulcanized. Mr. J. H. Cheever is the treasurer of the concern, and Mr. J. D. Cheever, deputy treasurer."

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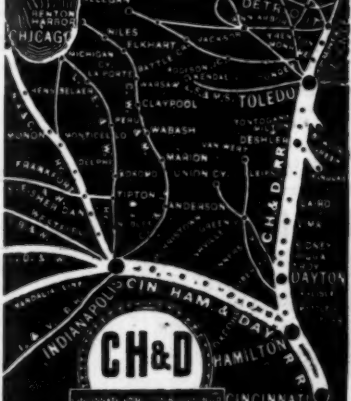
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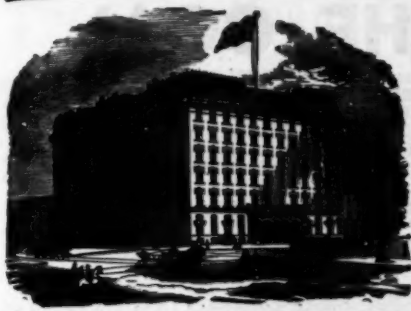
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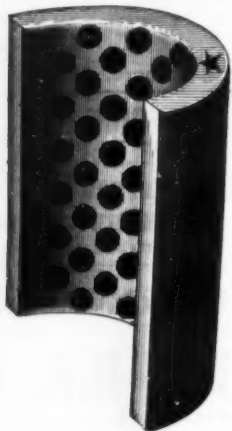


FIG. 1.

as in the waste and uncleanness from constant drippings.

In view of the fact that even the smoothest metallic surfaces, as shown under the glass, present innumerable pores and points which by interlocking cause friction, it occurred to Dr. Stewart Gwynn, of New York, that as the function of oil was only to keep the surfaces apart, the pores and cavities might be filled with an impalpable powder and rendered theoretically smooth, thus obviating entirely the necessity of oil.

Careful experiment following upon elaborated theorizing enabled Dr. Gwynn to produce a powder so fine as to be passed through a sieve of 15,000 meshes to the

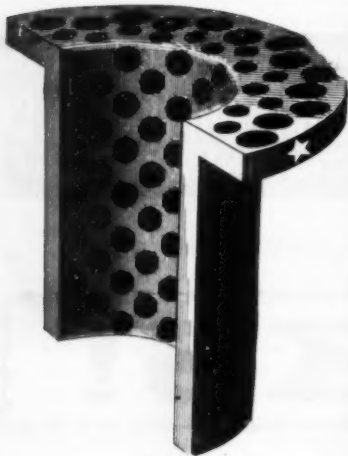


FIG. 2.

square inch, which, when pressed by enormous hydraulic pressure into small steel moulds, produces cylinders or plugs of 3-16, 1/8 and 5-16 inch in size. It has been found that the inherent strength of this material is not enough to carry any but light weights, therefore a solid bearing of this substance is inadmissible, but it is inserted in the ordinary brasses, holes being accurately drilled for the purpose, generally about ten to the square inch. The whole bearing surface is well covered by holes plugged as described, these holes being so drilled as to break joints and protect the entire brass. The protecting ends of the plugs are cut or filed off roughly. A few hours' running completes the fitting and gives a perfectly true bearing surface,

the plugs, once down to the level of the brass, wearing no more. The impalpable powder of which the plugs are composed, wearing away, polishes off the asperities and points of brass and iron, the two surfaces come together, there is nothing rough to tear, catch, or "fire," and so accurate a fit is insured as that no dust, debris, or other extraneous substance can interpose itself and cause cutting of the moving and fixed parts.

In the use of these bearings, theory and experiment, we are informed, have been fully substantiated in practice. They are being extensively used in this country, and have been introduced abroad; even in England we are assured they have become quite well established.

Our attention has been called to instances where they are being used on Calender rolls, 5-inch shafting, with 10 tons and more pressure, in printing machines, spinning frames, circular saws, wood-working machinery, cranks, bicycles, etc., at the usual speed of such machinery with-

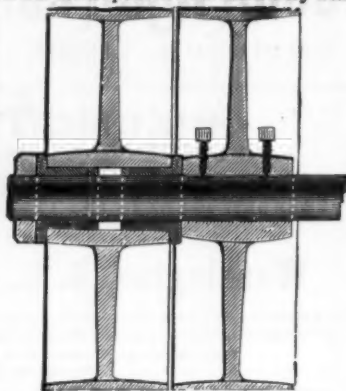


FIG. 3.

out a drop of oil, or any unusual wear of the journals.

The following table is taken from a report of these bearings in daily use from one to nine months, without a drop of oil, giving size of shaft and speed:

Main shafting.....	3 1/2 in.	at 150 revolutions per min.
Counter ".....	3 1/2 "	350 "
" ".....	3 "	250 "
" ".....	1 1/4 "	450 "
Main ".....	3 "	900 "
Lathe head, about.....	1 1/4 "	3,000 "
Loose pulleys at 450 and 750		" "

The cuts in this connection show in Figs. 1 and 2 the form of these bearings and the arrangement of plugs; Fig. 3 the adaptation to tight and loose pulleys. The above facts are not submitted to us as deductions of theory or experiment, but as taken from the records of actual work. Consequently, they assume a higher value, not only as regards the anti-friction qualities of these bearings, but in the economy of doing away entirely with the use of oil, which has become no small item of expense. The North American Metalline Co., 37 Bleecker street, New York, can give any further particulars desired.

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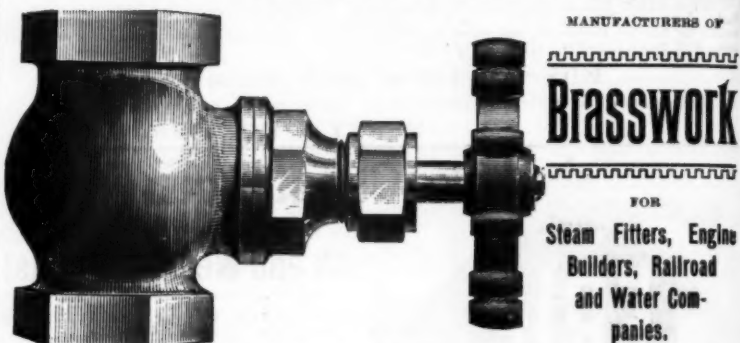
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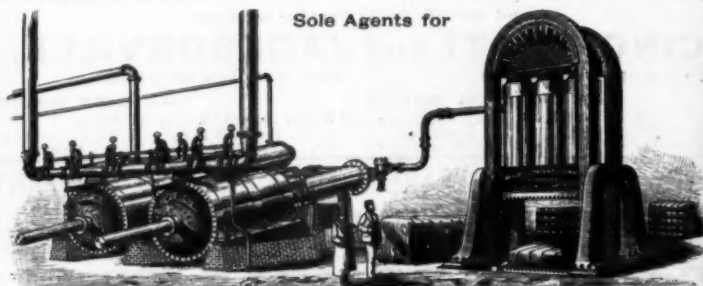
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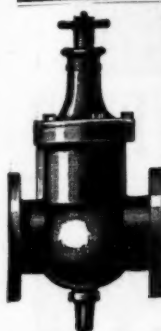


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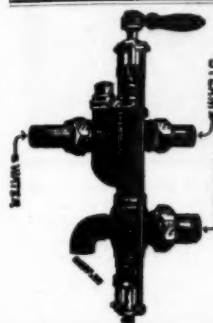


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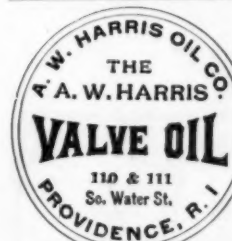
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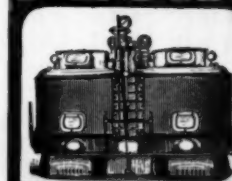
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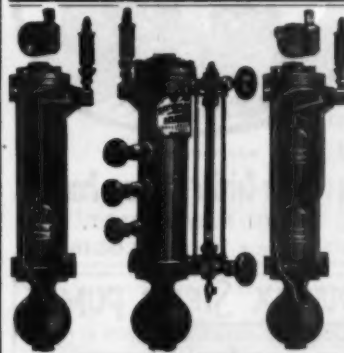
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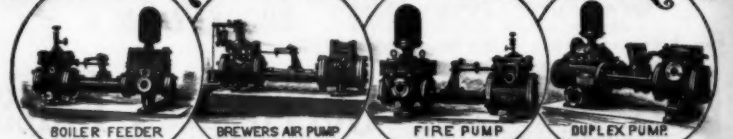


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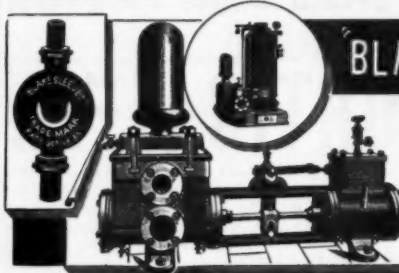
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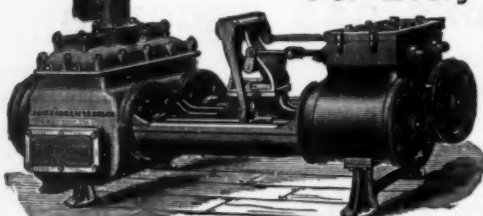
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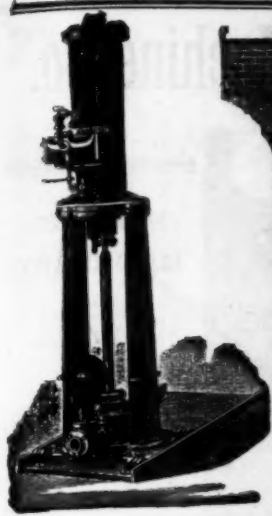
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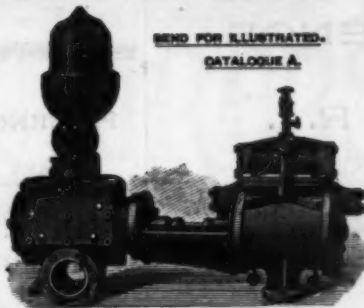
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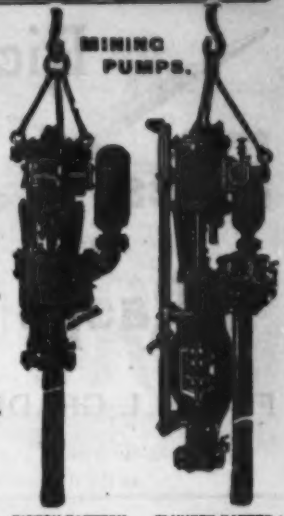


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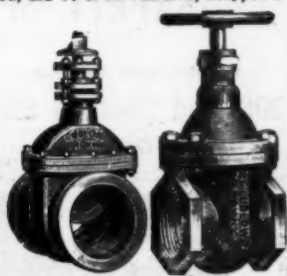
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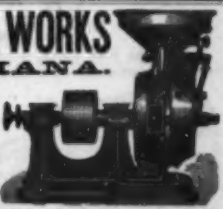
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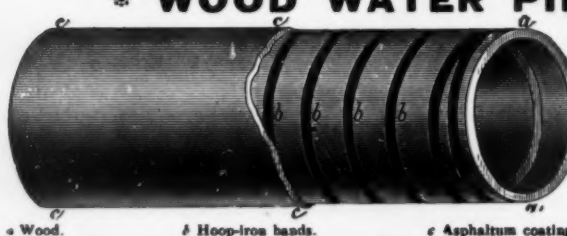

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